

**An investigation into the emotional responses of child athletes to
their coach's behaviour from a child maltreatment perspective**

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By

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Abstract

Millions of children participate in sport and through their participation come into contact with coaches who are there to guide and support them. However, it has been observed that not all children's relationships with their coaches have been positive ones, and concerns have been raised about the nature of the child-athlete relationship within the sports context. This research sought to use theory from child maltreatment research and apply it within a sports context to investigate perceived child athlete experiences.

The research used both qualitative and quantitative methodologies to investigate retrospectively athletes' perceptions of, and emotional responses to their coach's behaviour. The initial study used qualitative method to establish if key theoretical frameworks from outside sport had a resonance and relevance within a sports context. Twelve elite athletes, all of whom had been identified as 'elite' when children reported that they had experienced negative coaching behaviour on a frequent basis they also reported negative emotional responses to this behaviour, and emotional problems as a consequence of how they were coached when they were children. Study Two (n=229), focused on broadening the research to access a larger population of athletes in order to examine their perceptions and experiences of being coached. In order to achieve this aim a new questionnaire, the Sport Emotional Response Questionnaire (SER-Q), was developed. The SER-Q was grounded in the

real-life experiences of those athletes in Study One, and as such represented their expert opinions of their coaches' behaviour. Through factor analysis, a 22-item questionnaire was established which measured frequency of negative (i.e. emotionally abusive) coach behaviour, athletes' emotional response and perceived effect on performance. Results from this study showed that frequency of negative coach behaviour and emotional response were significantly and negatively correlated such that, as the frequency increased so did the negative emotional response. Study Three (n=314), was a confirmatory study, and found similar results to Study Two. Study Four (n=543), sought to investigate, through the SER-Q, specific questions in relation to: competitive level, athlete gender, and type of sport (either team or individual) and gender of the coach. Results revealed that there were no significant differences between athlete gender, type of sport and coach gender. However, significant results were found in relation to competitive level. Elite athletes (international-level and national-level) reported experiencing significantly more frequent negative coach behaviour: they also reported a greater negative emotional response to it than any of the non-elite (recreational-level, club-level and regional-level) groups. Finally, Study Five examined the perceived performance effect, and found a significant negative relationship with frequency, such that as the frequency increased so did the perceived negative performance effect; and a significant positive relationship with emotional response. Further results from this Study Five also found that there were only significant differences in relation to competitive level. Again elite athletes reported significantly greater detriments to

their perceived performance resulting from their coach's behaviour than did non-elite athletes.

A consistent finding across all the studies was that when athletes reported 'never' having experienced emotionally abusive behaviour from their coach, they always reported 'no emotional response', and no effect on their performance. Therefore, the SER-Q was able to discriminate between these two populations of athletes.

Overall, the findings from these studies have contributed to the development of a theoretical model that describes the process of emotional abuse from a child athlete perspective. Secondly, the findings reveal that elite athletes report different experiences of being coached when children than non-elite athletes. Furthermore, these studies found that theories anchored in family settings can be used to explore issues within a sports setting, and thus the child maltreatment perspective has relevance in developing sports specific theory in relation to the coach-child athlete relationship.

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Chapter One

Introduction

Personal Statement

I have lived in the world of elite competitive sport for over thirty years and have played a number of roles within it: athlete; coach; judge; and sport psychologist. It is these experiences that have led me to undertake this area of research.

So, by way of an introduction to this research, I would like to map some highlights of my own sporting journey in an attempt to give this work personal meaning and context. My love of sport began with gymnastics, and I remember being spell bound by Olga Korbett and saying to myself I want to do that - so I did. My early experiences of participating in gymnastics were ones where I turned up and did as I was told. The coach had complete power and control, and challenging or asking questions about what I was doing was not really an option. So you learnt compliance and submission if you were going to succeed, something that I was never very good at and always seemed to be at loggerheads with my coach. But I loved the sport, loved how it felt doing it, and the satisfaction that I felt when I was able to perform something new and difficult. It also gave me the possibility for creative expression which was the passion that drove my love of gymnastics for the whole time that I was involved in it.

Many years later I became a successful coach adopting a very different coaching methodology to the one I had experienced. I coached many British champions and represented my country as a GB coach on numerous occasions. During this time I was studying for my undergraduate degree in psychology where I took several modules that focused specifically on child development, and child-parent relationships. Through them I learnt the importance of 'healthy' functioning relationships, and the long term damage that can occur to children if the relationships with parents were dysfunctional. At this time I made no direct connection between my studies and what was happening in the gym, but it must have left a resonance with me which I have now come back to. I continued my studies in my post graduate degree, and this time I made a direct connection between my undergraduate degree and my love of sport by deciding to study Sport Psychology. At the time there were no postgraduate programmes in England so I went to America to study to become what I am now - a sport psychologist.

Throughout my time in sport I have either witnessed, or been told of instances in which elite child athletes have appeared to be put in situations of emotional vulnerability through the actions of their coach. These have included: young athletes being shouted at by their coaches, being isolated and ignored, being told that they are worthless and useless, and numerable others. In many instances when these situations arose within the specific context of elite sport I accepted these interactions as being part of working in that environment. However, reflecting on these experiences has led me to question more closely what I was actually witnessing, and

what impact they might be having on the child athletes. I realised that there was no research into this area, and if I was to understand it better it was the research that I needed to undertake.

Research Problem

The overarching purpose of this thesis is to explore the emotional responses of elite child athletes to their coach's negative coaching behaviour, using theoretical frameworks established within the child maltreatment literature to guide and support the research. This, therefore, is an exploration of the ways that their experiences of negative coaching behaviour were perceived by them and from their own point of view. It should be pointed out that the term 'negative coaching behaviour' has been created for this study. The coaches themselves may not have thought of their behaviour that way, nor indeed might the child athletes at the time. It may be these coaching behaviours were an accepted part of the coaching environment. However, its effect can be described as 'negative' – as 'negative' as the behaviours of other adults who have emotionally abused children in their charge and which have been described in the child maltreatment literature (e.g. Garbarino, Guttman & Seely, 1986).

Currently there is virtually no specific research that explores the issues surrounding the emotional responses of athletes within a sports context. Specifically, whilst there has been work that has focused on the behaviour of the coach, and tried to describe

it, there has been nothing that has considered the childhood sports experiences from the athlete's perspective.

Research Questions

The questions that arise from my experiences are: do child athletes experience negative coaching behaviour from their coaches? What is the perceived impact of negative coach behaviour on child athletes? What knowledge and understanding exists outside of sport that can be utilised to help to unravel the experiences of these child athletes? Are there parallels that can be drawn from abusive parent-child relationships that would help to understand the nature of these coach-child athlete relationships? How widespread are the child athlete experiences that I have witnessed? Or is it that my experiences were isolated instances and are not representative of what happens in elite child sport or indeed other levels of competitive sport?

A brief overview of the research: A personal narrative.

This is a study of sport, more specifically a study of child athletes' perceptions of their coaches' behaviour; it is therefore a study in sport psychology and as such is a product of both my research and professional training. More specifically this is a study in the design of a measure to test the retrospective perceptions of child athletes through the use of psychometric principles and techniques.

Psychologists have used psychometric approaches to examine many different phenomena. Psychometrics is a branch of psychology that is concerned with the science of quantifying psychological aspects of a person's functioning. It uses standardised procedures of design, and interpretation of data through quantitative statistical testing to measure the psychological variable. Sport psychology has a long tradition of psychometric assessment from the 1960's when it was used to profile and select athletes through personality testing. Building on this; academic researchers working within the field of sport psychology have used psychometric measurements to examine a range of issues that exist within sport (Bartlett, Gratton & Rolf, 2006). These have included such phenomena as cohesion, self-confidence, anxiety, mood and leadership to name a few. Thus it is from this rich tradition that I approached the 'real-world' problem of understanding the child athlete-coach relationship by developing a psychometric instrument. However, I found that this is not the tradition of research into parent-child relationships and in doing so I sought to apply my research training and background to investigate the research question from a very different perspective from that previously used by other researchers in the field.

Research into child maltreatment has tended to adopt a more qualitative approach. This was highlighted by Hulme (2007) who stated; 'there have been very few studies that have employed psychometric evaluations as part of the methodology to establish accuracy of the measurements of both construct validity and internal reliability' (p. 854). There is a need to ensure that psychometric vigour is applied to assessment of

any new instruments. (DiLillo, De Gue, Kras, Di Loreto-Colgan & Nash, 2006). Thus psychometric rigor became the focus of the studies that followed, and they became investigations using psychometric processes and principles to explore the measurement of the retrospective athlete perceptions of the coach-child athlete relationship.

As previously discussed, this research stems from years of observations of children and their coaches within elite sporting environments. From these experiences I began to question whether the relationships between coach and child athlete might in some way be detrimental to the athletes. Were the child athletes affected by the way they perceived their coach's behaviour? How widespread were the child athlete experiences that I have witnessed? Or was it that my experiences were isolated instances and were not representative of what has happened in elite child sport, or indeed any level of competitive sport? These were the questions that have fuelled this research.

This research aimed to explore the questions raised through different methodologies and research techniques drawing upon knowledge from outside of and inside sport as its basis. I endeavoured to make sense of some of the issues and questions raised by providing a solid research foundation which would produce reliable evidence. Throughout the research process I adopted a quantitative methodological approach built upon testing reliability and validity of data at every stage of the research process. As a result I sought to ensure that conclusions could be drawn so on the

basis of sound research evidence and rigorous statistical analysis of child athletes from different sports, with different coaching experiences and at different competitive levels.

Within sport psychology and sport in general, there have been numerous studies that have focused on coaches, their behaviour and what they should be doing. Indeed every sport has numerous coaching manuals, advice for coaches on the techniques of the sport, and how to manage athletes and improve performance. However, there is very little that has focused attention on the athletes, and in particular child athletes. There has been minimal concern on how the athletes might feel about their experiences in sport, and how these might impact on them. But to fully understand the impact of one person's behaviour on another it is important to comprehend the behaviour from the recipient's point of view, in this case the child athlete.

Thus it was this broad issue that I addressed; what did it feel like to be coached as a child from their point of view? Thus in essence this is a series of investigations into the perceived relationship between child athlete and coach from the athlete perspective. Whilst it utilises a framework of questioning from a child maltreatment perspective, in particular emotional maltreatment, it is not an investigation into abuse, it is more specifically an investigation into the emotional responses of child athletes to their perceptions of their coach's behaviour.

Study One

My main aim in Study One was to explore the phenomenon and in order to do so it raised the question; what knowledge and understanding exists outside of sport that can be utilised to help to unravel the experiences of child athletes? The initial framework for this research was founded upon the work of Garbarino et al's. (1986) who presented a theoretical basis for understanding emotional abuse by outlining adult (in this case, parents) behaviours, which he believed if were experienced by children would cause them harm. When examining these behaviours it became apparent that I had witnessed on many occasions adult coaches exhibiting behaviours that seemed very similar to those described by Garbarino et al's. when interacting with their elite child athletes. However, as I was interested in the child athlete's response, rather than the coach's behaviour, I knew I needed to objectify it in some way, but from the child athlete's own subjective viewpoint. I did not wish to study coach behaviour as such, but rather to capture the essence of it in order to study the child athlete's response to it. The adult behaviours outlined by Garbarino et al's. provided me with the means of doing this and became the starting point for the study. This then led to the theoretical framework which underpinned the first study, and in essence I explored the relationship between coach and child athlete through the lens of emotional maltreatment, as developed by Garbarino et al's. However, it I should make it clear that this study was not based on the methodology of Garbarino et al's. nor any theoretical or philosophical assumptions that he himself, may have brought to his work, for he was working from a very different perspective and based much of

his work on case studies whilst working as a social worker. This approach did enable me to ask the question: Are there parallels that can be drawn from parent-child relationships that would help to understand the nature of elite coach-child athlete relationships?

Study One was an initial exploratory study which used interviews as the data collection tool. These interviews were constructed in the form of a verbal questionnaire specifically designed to elicit very precise quantifiable information. Each interview followed the same format and was a rigidly structured step-by-step progression, and the layers of questions acted to probe the fallibility of memory (see chapter 3). Participants in this study were reflecting on their past experiences as international child athletes, and so their responses represented the residual impact of their experiences. The interviews were constructed with the express purpose of asking 'did it happen?' If so, 'how often?', and if so, 'how did it make you feel'? The answers given were, of course, subjective, but participants were not encouraged to elaborate, nor were their subjective views probed, rather they were simply asked to describe, and by making every answer dependant on the preceding one, giving respondents an opportunity to reconsider their answer. If they did not, but gave additional information each time this would tend to authenticate the earlier answer(s).

Thus the data although subjective by its very nature, were in fact being used to define specific information and descriptions, and as such formed the foundation for the psychometric process for the questionnaire design that followed.

The issue of retrospection.

In choosing to investigate a potentially sensitive recall area I was conscious that I should approach it with ethically sound practice as well as methodologically robust procedures. How could I interview a twelve year old gymnast about their coach? How would the sensitive issues be discussed? What would that experience be like for the child? If I did work in 'real time' with the child athletes would I be not simply be investigating the relationship but changing it? In considering these questions it became apparent that talking to elite child athletes about their experiences of their coach when they were still currently working with them would raise a number of issues which might render these athletes emotionally vulnerable, and consequently I ruled it out. This left the only option, which was to ask ex-elite child athletes about their experiences and consequently construct my research using a retrospective approach. There was the danger of course, that the athletes would not be able to remember, or that their memories were faint or distorted, and it was apparent therefore that the reliability and validity of data gathered from retrospective methods had to be carefully considered. Indeed Burbach and Borduin, (1986) described the retrospective technique as 'questionable at best' (p.146). Their concerns were centred on the fallibility of memory which may distort early recollections.

I was aware, therefore that there was currently a debate within child maltreatment research that contemplates the question of retrospective versus prospective methodologies, and that reviewing the debate might bring to light useful considerations applicable to my study, even though this is not specifically a study of child maltreatment.

It has been said that; ‘for child maltreatment researchers the reliability of retrospective findings is no mere methodological quibble. Much of what we know about the long-term effects of childhood abuse comes from retrospective studies’ (Kendall-Tackett & Becker-Blease, 2004, p. 723). One only has to consider all of the prevalence studies which have been the foundation for policy and legislative change to appreciate the significance of retrospective methodologies; ‘and the maltreatment field would lose valuable information if retrospective findings were discarded’ (Dube, Williamson, Thompson, Felitti, & Anda, 2004, p. 730).

Indeed one of the inherent problems with prospective methodologies is that it is hard to identify and follow maltreated children because the very nature of maltreatment means that it subject to high levels of secrecy. Furthermore ‘Professionals who discover abuse must report it to law enforcement and/or child protection agencies, which are ethically bound to intervene in some way. Once the children are identified, action must be taken’ (Kendall-Tackett & Becker-Blease, 2004, p. 723). This further confounds the research dilemma because the action or

intervention might act in some way to alter their original perceptions of their experiences. Further to this one has to consider that the majority of survivors of abuse, and in particular sexual abuse, have not been identified as children. But these victims are identified as adults when they present with psychological disorders which can only be retrospectively attributed to their childhood abuse. Within the context of sport, coaching behaviour is not generally perceived to be 'abusive' and would not be considered as a catalyst for psychological disorders. Thus the possibility of undertaking prospective methodologies is currently even more open to question within the sport context.

Acknowledging the potential limitations of retrospective methods there have been a significant number of studies into sensitive issues that have tried to measure the stability of memory by utilising test-retest designs (Rivers, 2001; Hulme, 2007). These studies have found that recollections are stable over time, with participants giving very similar responses in the test and retest condition. Furthermore, it has been suggested that the use of structured questionnaires has been found to aid recall (Brewin, Andrews & Gotlib, 1993). Having examined these issues I felt confident in using a retrospective approach in my research, and that the design of the study tested for the potential fallibility of memory. Indeed I would go further to say that without a retrospective methodology it may not be possible to research this topic at all.

Ethical Considerations.

I was very aware throughout this study of the ethical considerations that needed to be taken into account at every stage of the research process, indeed these ethical

considerations drove some the decision making with respect to ensuring that the athletes who were taking part in the research were protected as much as possible. Thus some key ethical principles were applied during the research process.

Consent: The investigator informed all participants of the objectives of the investigation. The investigator informed the participants of all aspects of the research that might reasonably be expected to influence their willingness to participate. The investigator explained all other aspects of the research and invited participants to ask questions. Following this written consent was obtained from all participants prior to each interview.

Deception: All participants were informed of the nature of the research. This was done through a verbal explanation prior to commencement of the interview so participants were in no doubt as to the subject matter to be discussed.

De-Briefing: Following the interviews, I discussed the topics covered with participants and invited further questions. All participants were informed that they could have access to any of their data collected by way of the transcript of their interview, and that they could have access to any research reports that were produced following the investigation.

Withdrawal from the investigation: At the outset of the investigation it was made clear to participants of their right to withdraw from the interview process at any time if they no longer wanted to participate.

Confidentiality: Subject to the requirements of legislation, including the Data Protection Act, all information obtained about participants during this investigation remains confidential. Participants were informed that they had a right to expect that information they provided would be treated confidentially and, if published, would not be identifiable as theirs.

Protecting participants: Care and consideration was given to the welfare of participants in the research, and all participants were provided with contact information for the investigator should any issues have arisen for them as a consequence of the investigation. It was critical that trust was built between the participants and the researcher, given the sensitive nature of the area of investigation. Furthermore, the investigator did not personally know all the participants, when they did another investigator conducted the interview. Given that in a chained purposive sample the participants recruit their peers, it is hoped that the participants did not feel threatened by the process or they would not have encouraged their peers to participate as they did.

Giving advice: Given the potentially sensitive nature of the research it was acknowledged that, a participant may solicit advice concerning issues that may have arisen as a consequence of participating in the investigation. In this case if the issue was serious and the investigator was not qualified to offer assistance, the appropriate source of professional advice was recommended in accordance with the British Psychological Society (BPS) Code of Conduct. In this investigation this was offered by the researcher who was an experienced accredited sport psychologist. It must be

noted however, that no participant sought this advice or support following their participation in this investigation.

These procedures were carried out in line with the Brunel University Research Ethics Guidelines that were in place at the time of data collection. It should be noted that at the time of data collection there were no ethics committees in place at the university, and as such the research did not undergo a process of ethical approval. However, the BPS Code of Conduct (1992) was consulted in the consideration of the ethical issues in this research.

The findings from the first study revealed that all of the elite child athletes retrospectively reported that they had experienced a number of the behaviours from their coaches as described by Garbarino et al's. (1986) which suggested that using the lens of emotional maltreatment to explain the relationships between coach and child athlete was fruitful in highlighting issues that had previously been hidden.

Study Two.

The emergent questions that arose from these findings were how widespread might the reported experiences found in Study One? In order to address this question it was apparent that a wider population of athletes from diverse sporting backgrounds, both team and individual and who were coached by both men and women would need to be accessed to examine if the findings from Study One reflected a more widespread phenomenon. Thus this could only be achieved if a

valid and reliable psychometric instrument was developed that would measure the perceptions of child athletes. Therefore applying the principle that; ‘psychometrics research be usefully applied to societal important ‘real-world’ measurement problems’ (Stout, 2002, p.486) the focus of the investigation became the development of such a tool.

Study Two focused entirely on developing and testing, through appropriate statistical procedures a new psychometric instrument. The Sport Emotional Response Questionnaire (SER-Q) was developed as a retrospective self-report measure of an athlete’s perception of their coaches’ behaviour, when they were competing at their highest level, and how that behaviour made them feel.

The SER-Q utilised the original in-depth interview source data from Study One from the 12 ex-elite child athletes to generate the items. The eight categories identified by Garbarino et al’s. (1986) - belittling, humiliating, shouting, rejecting, threatening, scapegoating, isolating, and ignoring were used as the framework for the questionnaire design. From these responses 32 items were generated for the initial version of the SER-Q. Each item thus was grounded in the reporting of perceived real-life experiences that athletes had described experiencing from their coaches.

The instrument adopted a Likert-scale type format as a means of accessing the participant’s perceptions of their childhood experiences which generated responses in the form of numerical data. However, whilst this might appear to be ‘objective’

numerical data there are some issues that need to be considered. This research acknowledges that from the responses generated from the SER-Q the numbers cannot be interpreted without understanding the assumptions which underlie them. Take, for example, the issue of frequency which is depicted on the SER-Q by a simple 1-to-5 Likert-scale (1: Never, 2: Rarely, 3: Sometimes, 4: Very often, 5: Always). So in answer to the question; ‘My coach put me down in front of others’, where the respondent is required to consider their experiences and decide which ‘number’ best represents their experiences we have to consider some of the following issues. What does circling any number mean? How do we interpret the value? Therefore we cannot really understand this quantitative value unless we dig into some of the judgments and assumptions that underlie it and ask some of these questions, adapted from Trochim, (2006):

- Did the respondent understand the term "put down"?
- Did the respondent read carefully enough to determine what the statement means?
- Does the respondent care or were they just circling anything arbitrarily?
- How was this question presented in the context of the questionnaire (e.g., did the questions immediately before this one bias the response in any way)?
- Was the respondent mentally alert (especially if this is late in a long survey or the respondent had other things going on earlier in the day)?
- In the respondent's mind, is the difference between a "2" and a "3" the same as between a "3" and a "4" (i.e., is this an interval scale)?

It must be acknowledged that all numerical information involves personal judgments or understandings about what the number means. In this research I was constantly aware that the numbers assigned by the respondents on the SER-Q merely represent their recalled perceptions, and not an evaluation of ‘actual’ instances of negative coach behaviour. It also needs to be remembered that one

person's 'always' might in reality be very different from another's. This further emphasised the need for rigorous statistical testing in order to ascertain the consistency with which the respondents completed the questionnaire. If I was to be able to use the SER-Q and trust the data obtained from it, I had to ensure that the statistical procedures were extensive and rigorous to be sure of the worth of the instrument.

After the process of subjecting the SER-Q to the rigorous statistical analysis of factor analysis and split-half analysis, it emerged that there were only 22-items that could be considered valid and reliable. The testing of the reliability and validity of the questionnaire is an important and central theme of this study (see chapter 4). However, we should not assume that words and numbers have no objective meaning at all. It is assumed when analysing Likert-scale data that for each respondent 5 is always larger or stronger, than 4; that 4 is larger or stronger than 3, etc. And so the data gives us information about the direction and the relative strength of a response, even if it does not give a precise value that is common across all respondents.

Ethical considerations.

The ethical considerations for this study, and for Study Three, focused on the same broad areas as for Study One but the different nature of the research required different safeguards to be put in place.

Consent: In a similar manner to Study One the investigator verbally informed all participants of the objectives of the investigation, which included all aspects of the research that might reasonably be expected to influence their willingness to participate. Following this written consent was obtained from all participants. Given that the participants in this study were students of the university at which I taught, it (unlike Study One) was acknowledged that potentially I could have been perceived to be in a position of authority or influence over the student participants and that this relationship must not be allowed to pressurise the participants to take part in, or remain in, an investigation (see section on withdrawal and confidentiality). Consequently, it was stressed to these participants that all questionnaire data would be anonymous, and there would be no means for the researcher to identify any individual from the data received. Furthermore, whilst the participants were students, they knew that I did not actually teach them and therefore any theoretical concern regarding a potential power relationship between them and myself was effectively removed as a) they were not my students and b) their responses were entirely anonymous.

Deception: All participants from all studies were informed of the nature of the research. This was done through both a verbal explanation prior to commencement of completion of the questionnaire, and a written explanation on the consent form.

De-Briefing: All participants were informed that they could have access to any research reports that were produced following the investigation. Furthermore,

overviews and summaries of the research have been made available to student participants through lectures at the university.

Withdrawal from the investigation: At the outset of the investigation it was made plain to participants of their right to not take part in the research process. This resulted in a number of student participants deciding to withdraw by either not completing the questionnaire, or leaving the room following the explanation of the research prior to completing the questionnaire.

Confidentiality: To ensure confidentiality for the participants each questionnaire was completed anonymously. All questionnaires were collected by means of participants putting their questionnaire into a pile as they left the room out of sight of the researcher. To further ensure confidentiality for the student participant's consent forms were collected separately from their questionnaires. By this method it is not possible to identify any participant.

Protecting participants: As for Study One, all participants were given access to the investigator's details should any issues have arisen for them in the participation of the investigation.

Study Three.

An important part in the process of validating a new instrument is the ability to confirm and replicate results previously obtained. If one is able to do this it strengthens the certainty with which one can trust data generated from it, and hence the ability of the instrument to accurately answer specific questions.

To do this I conducted a replication study of the SER-Q using an entirely different, but similar population of athletes. By following the same rigorous statistical analysis as for Study Two on the 22-item version, in so doing I was able to replicate the findings. This helped to confirm the reliability and the validity of the SER-Q, an important element in the process of psychometric instrument development (see chapter 5).

Ethical considerations were taken into account and followed as previously described for Study Two.

Having established the psychometric efficacy of the SER-Q it was now appropriate to use it to answer very specific questions to examine any differences that may or may not exist in different sub-populations of athletes. Thus data were analysed with respect to the competitive level of the child athlete, their gender, the gender of the coach and the type of sport they participated in.

Findings from this study revealed that the only significant differences found were with respect to the level that the athlete was competing at when they were a child athlete (see chapter 6 and 7).

Overall the research journey that I have undertaken has led me from a place of experiential observations and uncertainty to a more firmly found footing in scientific discovery using psychometric methodology as the vehicle. The chapters which follow detail this process and offer theoretical explanation, methodological detail and exploration of data and results.

Structure of the Thesis

This thesis is an exploration of previously uncharted territory with no pre-conceived ideas as to what may emerge. This chapter is followed by the *Review of Body of Knowledge* which critically considers not only relevant literature from a broad spectrum of disciplines, but also documents changes in legislation, and a thorough examination of the recent history and the development of theory, practice and policy. Thus it builds a broad foundation from which to move forward and explore the research problem.

The process through which the thesis develops reflects the systematic organisation of information from a number of relevant areas, and the modification of them to reflect the results as they emerged. Throughout all the studies my aim was to build on knowledge gained from each preceding study, and through a process of reflection, answer the emergent questions that were generated. Consequently, each study is preceded by a review of literature that considers relevant research that is pertinent to that study. Through this means the thesis develops not only specific data that enabled the emergent questions to be answered, but also develops a new theoretical model in parallel. In essence the process of moving from one study to the next was an organic one, whereby the driving force was to respond to the emergent questions, and provide a means to answer these questions through the next study.

Chapters 3-7 detail the research programme through different studies using a range of different methodologies, both qualitative and quantitative. Thus each study is constructed in the following way:

- An introduction of the focus for the study, with relevant new literature where appropriate
- Aims for the study
- Methodology
- Results and discussion
- Implications for the theoretical model
- Emergent questions (to be addressed in the next study)

Chapter 8 provides a summary of the results across the six studies, and considers the strengths and limitations of the research and describes the overarching findings that emerge from them. Conclusions are then drawn both in relation to previous research, but also with respect to the implications this has for future research.

Glossary of Key Terms

For the purpose of this study the subsequent terms will be used and defined in the following way.

Child athlete: Any person under the age of eighteen who participates in sport.

Child Maltreatment: An umbrella term encompassing a range of specific types of abuse; including physical, sexual, emotional, psychological and neglect.

Club level: In which athletes compete against other selected athletes from local clubs.

Coach: Any adult who is working with athletes, and is responsible for improving/developing their sports performance.

Elite child athlete: Any person under the age of eighteen who competes in any sport at international or national level competition.

Emotional Abuse: The persistent emotional ill-treatment of a child such as to cause severe and persistent adverse effects on the child's emotional development. It may involve conveying to children that they are worthless or unloved, inadequate, or valued only insofar as they meet the needs of another person. It may feature age or developmentally inappropriate expectations being imposed on children. It may involve causing children frequently to feel frightened or in danger, or the exploitation or corruption of children. Some level of emotional abuse is involved in all types of ill treatment of a child, though it may occur alone' (Department of Health et al., 1999, p.5-6).

Emotional Response: The perceived emotional reaction either positive or negative, resulting from the interaction between coach and child athlete, from the athlete perspective.

International level: In which athletes compete against selected athletes from other countries.

National level: In which athletes compete against selected athletes from across their country.

Negative coaching behaviour: Any coach behaviour that fits Garbarino et al's. framework of emotional abusive behaviours and is perceived by the athlete to have a negative emotional impact.

Psychological Abuse: Psychological abuse is the sustained, repetitive, inappropriate behaviour which damages or substantially reduces the creative and developmental potential of crucially important mental faculties and mental processes of a child; these faculties and processes include intelligence, memory, recognition, perception, attention, imagination and moral development. Psychological abuse impedes and impairs the child's developing capacity to understand and manage it. Psychological abuse greatly confuses and/or frightens the child, renders her more vulnerable, less confident, and will adversely affect her education, general welfare and social life (O'Hagan, 1993, p. 458).

Recreational level: In which athletes are not selected, but compete purely for recreational benefits.

Regional level: In which athletes compete against other selected athletes from their local region or county.

Sport: Any activity requiring physical skill that is inherently competitive in nature.

Chapter Two

Review of Body of Knowledge

Introduction

As has been previously stated; this is a study in sport, more specifically a study in sport psychology examining the child athletes' perceptions and retrospective emotional responses to their childhood experiences of interacting with their coaches. It is not presumed that these perceptions or indeed emotional responses indicate abuse or constitute maltreatment. However, in order to fully investigate the research questions posed, the body of knowledge of child maltreatment must be acknowledged as the starting point. In doing so it aims to present a review from which analogies can be drawn within the context of sport. Thus it recognises that while the majority of this review examines literature embedded from a child maltreatment perspective, it is not exclusively governed by this.

This review begins with a thorough examination of the development of theory and recent history, practice and policy. Mapping out the growth of expertise in this field should assist in providing theoretical underpinning to support research in a sports context where currently virtually none exists.

Sources of information for this review are not restricted solely to research but rather highlight the growth of an emergent field in a broader context. Consequently,

consideration is given to a number of landmark events that includes: legislation, inception of key organisations, journal developments as well as seminal publications in both books and journals.

The majority of research has come from the studies of child psychiatry, psychology, paediatrics, social work and law. Each of these have different agenda and, as a consequence, look at the problem from different perspectives. All operate in very different worlds from that of sport and, as a consequence, their focus has been primarily on developing an understanding of those parent-child relationships which are perceived to be fundamentally dysfunctional and which may result in the maltreatment of the child.

The term ‘child maltreatment’ will be used here as an umbrella term encompassing a range of specific types of abuse; including physical, sexual, emotional, psychological and neglect. However, where a specific type of abuse is referred to other terms are utilised as appropriate (see glossary of terms).

This review explores the issue of child maltreatment within a sports context, to look at the current levels of understanding and functioning of sports organisations in relation to the safeguarding of young athletes.

Lastly this review will examine the relationships that exist between coach and athletes. The primary focus of this research is to highlight the gap that currently

exists in the understanding of childhood experiences of young athletes by their through interaction with their coaches.

This review serves as an overview highlighting some of the critical developments that provide an informed backdrop to the research. In this way it aims to contextualise key issues that underlie all of the individual studies. However, as this research emerged through an organic process of responding to, and addressing emerging questions, each individual study has its own unique review that serves to focus on the literature pertinent only to the specific research question that is being addressed. A brief outline of the main elements contained in each study is presented below, by way of a preview to the reviews of literature that precede each study.

A preview of the reviews of literature for each study.

Study One: see Chapter Three.

Primarily there are four key bodies of work that provide the foundation for Study One. These are: Garbarino et al's. (1986) proposed framework of emotionally abusive behaviours, O'Hagan's (1995) concept of the importance of behavioural frequency in emotional abuse; Bingelli et al. (2001) identification of emotional problem symptoms occurring as a result of childhood emotional abuse, and lastly the concept of a misuse of 'power over' in the culture of coaching existing in elite sport as proposed by Burke (2001). Moreover, all of these concepts are used as a means of developing an understanding of the perceptions, cognitions and feelings of the coaching process from the child athlete perspective.

The focus of the review in Study Two is to discuss the issue of ‘measurement’ within the field by examining key measurement methodologies within child maltreatment generally, and more specifically within emotional and psychological abuse. There have been three distinct strands of development in this area which are:

1. Measurement of prevalence and incidence
2. Measurement of symptoms for clinical diagnosis
3. Measurement to determine classification of abuse typologies.

The review highlights the major contributions that have been made and review specific instruments and methods of validation.

Study Three examines the literature relevant to testing for reliability of measures through the use of confirmatory studies.

Study Four examines specific literature in relation to competitive level, gender of the coach, gender of the athlete and the type of sport that the athlete is competing in. The review in Study Five explores literature from both inside and outside of sport that has considered performance in different domains in relation to childhood experiences.

Theories of Child Maltreatment

There have been a number of theories that have been proposed to explain why adults mistreat children. Even though this is not a study of why adults mistreat children, it

is useful to briefly consider some of them. Broadly speaking these theories have focused on trying to understand the social context within which maltreatment exists. Some of these theories have adopted what can be described as a ‘macro’ approach focusing in on structural factors such as the family, whilst others have adopted a ‘micro’ approach focusing primarily on the individual. The macro approach has tended to explore maltreatment through the lens of the ‘abuser’, asking questions about why they engage in such behaviour. Often these theoretical approaches have centred on providing explanations for sexual abuse and physical abuse, asking such questions as ‘why does sexual abuse happen?’

For the purpose of this review some of these will be briefly examined and then considered within a sports context, where the applicability will be discussed in relation to coach-child athlete interaction.

Family structure.

Explanations for violence within families have identified that the structures that exist within can contribute towards proneness for violence (Brinkerhoff & Lupri, 1988; Gelles & Straus, 1979). The power relationships between children and parents are such that adults have control over their child, and are given legitimate means through which they can manage their own children (i.e. physical, verbal or emotional punishment). Consequently, when this power is misused, children have no means of challenging their parents, and so are at their mercy.

Within a sports context, there may be parallels that can be drawn from this observation. In sport, power is legitimised through the coach; it is the coach who determines the training regimes, competition schedules and coaching climate within a sports club or organisation. Child athletes have little or no power in the structure of most sports (Burke, 2001) and if an adult, in this instance a coach, is abusing their position of power by maltreating the child athlete, they have limited resources through which they can challenge the structure that they are training within.

Strain Theory

Strain Theory proposes that where there is greater 'strain' within a family (created through frustration, economic disadvantage and limited opportunities) this may result in increased rates of child maltreatment (Merton, 1938 cited by Miller-Perrin & Perrin, 1999). Given that the reported rates of child maltreatment are highest in lower-income families, unemployed families and families supported by the state there may be merit in this theoretical approach. It has been well documented that poverty produces increased stress on family relations (Straus, 1980) which can become overwhelming and result in aggressive behaviour, usually towards children. This aggressive behaviour has been described as a sub-culture of violence (Wolfgang & Ferracuti, 1972) which becomes normalised behaviour within lower socioeconomic groups.

Further explanation with respect to heightened frustration causing an aggressive response has been outlined by the frustration-aggression hypothesis proposed by Dollard, Doob, Miller, Mowrer and Sears (1939). They hypothesised that where an individual is experiencing frustration but is not able to express or manage her/his emotional response she/he will displace their aggression onto an innocent person, in this instance the child. This will then result in the adult behaving aggressively, and or violently towards their child as a means of reducing their own levels of frustration. Consequently, a child exposed to this type of adult behaviour would constitute a child who has been maltreated.

Understanding the potential application of these theories into a sports context is problematic. One could speculate that a coach who was experiencing heightened frustration and strain in their lives might victimise the children that they coach through overtly aggressive behaviour, and as such the child athlete could become the innocent victims or targets for maltreatment. However, these theories infer that frustration is taken out on victims away from the workplace and behind closed doors. As such they would appear to offer little in terms of providing a theoretical underpinning for coach-child athlete relationships.

Social Bonding Theory

This theory adopts a different perspective and in essence asks the question why all families are not violent? It concerns itself with those social forces that are in place that work to prevent people committing violent acts? The proponent of social

bonding theory, Travis Hirschi (1969) suggested that when people have strong social bonds they are constrained in their behaviour and conversely when these social bonds are weakened they are not. There are three important components of social bonding to be considered in the light of child maltreatment which contribute to the conformity of people's behaviour away from deviance these are; commitment, attachment and belief.

Commitment in this context refers to the degree to which people are invested in society through conventional activities such as employment, home, family; and conventional success. People who do not have commitment to the society in which they live are less conforming, and consequently are more likely to break the societal norms of which child abuse is one. Attachment within the context of social bonding theory refers to the connections that an individual has within a community. Individuals who know their neighbours, feel a sense of belonging are considered to be attached. These attachments create strong bonds between people which act as a social barometer of behaviour, and disappointing people through deviant actions would be undesirable. Where an individual is socially isolated they have less at stake in social conformity and hence are more likely to be abusive.

'Belief' in this context is the degree to which one holds the view that the laws protecting children are 'right' and 'just'. A person who believes that their children are their property and consequently no one has the right to 'tell them' what they can

or cannot do to them is more likely to be abusive than someone who holds the opposite belief.

In the context of sport one would expect that coaches working within it have commitment to the club that they coach at, which is often perceived to be making a positive contribution to the community in which it is based. Thus it could be said that sport offers strong social bonds between athlete, coach and community and as such would serve to mediate the behaviour of the participants within it. Thus the elements of 'attachment' and 'beliefs' could be seen to be happening within a sports context, and whilst attachment to the club would generally be perceived as being a positive contributor to the social barometer mediating the behaviour of adults in a manner that safeguards the children participants, the belief system that might be in operation may operate in a different way. So for example some commonly held beliefs such as 'no pain , no gain' or 'winning is the only thing' might influence adult behaviour towards children in a potentially harmful way that becomes embedded in the culture of any given sports club or organisation.

Attachment Theory.

Attachment theory has been said to 'offer a framework for understanding and treating the developmental effects of abuse and neglect' (Bacon & Richardson, 2001, p. 397), and takes the child perspective with respect to offering explanations of the impact of these early childhood experiences on self perception, and self

functioning. Thus the focus becomes on the ‘child’s responses rather than the parent’s behaviour’ (Bacon & Richardson, 2001, p. 384).

This theory was originally proposed by Bowlby, (1969, 1973, 1980) who developed it from his observations of children in orphanages. He observed that children build ‘internal working models’ of their own self-worth through their earliest experiences with their caregivers. It is through these experiences that children feel secure or insecure, and thus this becomes the cornerstone of their personal-social development (Bacon & Richardson, 2001). The work of attachment theory was further developed by Mary Ainsworth (1978) in her groundbreaking ‘strange situation’ work with children between 12 and 18 months, which culminated in the recognition of three distinct types of attachment ; secure attachment, ambivalent-insecure attachment and avoidant-insecure attachment. Later a fourth, disorganised-insecure attachment was added by Main and Solomon (1986). These are briefly described below:

Secure attachment

This describes a healthy reciprocal relationship between child and carer. The child’s emotional needs are quickly met through comfort, empathy and understanding. The child feels able to explore their world, safe in the knowledge that there is a secure base to return to. Children with secure attachments become adults who are able to express their emotional needs, through reciprocal relationships. They are able to both expect that their needs will be met, and are able to meet the needs of others. Children who experience secure attachments are deemed to have a lifelong

protection from stress and are emotionally stable, and have a greater chance of managing and coping with life traumas and stress.

Avoidant-insecure attachment

Avoidant attachment develops when parents actively discourage affection, and do not respond to distress. They believe that emotions should not be expressed, rather that they should be suppressed. Consequently, children who have been reared in this environment rarely feel loved and nurtured. This can result in children hiding their emotions through withdrawal or internalisation of difficult emotions. As adults, avoidant children find it difficult to connect with others emotionally and are often unable to express their feelings finding it a source of anxiety. Adult relationships are often difficult and hard to maintain as they shy away from intimacy.

Ambivalent-insecure attachment

Children who experience this type of attachment live in a world of uncertainty where sometimes their emotional needs may be met, but at other times this will not happen. This lack of predictability causes the child to be confused and often distressed. The distress felt by ambivalent children results in diminished self confidence and low self worth. This type of attachment is often seen in families where there are drug or alcohol problems and mental health issues. As adults this children are often susceptible to mental health problems including depression, anxiety and eating disorders. They also find it difficult to cope with manage trauma and cope with stressful situations.

Disorganised-insecure attachment

Children who experience disorganised attachment are cared for by adults who are not able to respond appropriately to the child's emotional needs, often being unaware of them. This may occur because the carer has unresolved emotional issues which results in a lack of resources to draw upon to meet the needs of the child, or mental health problems. Disorganised attachment has been associated with abusive behaviour towards the child.

Disorganised attachment in childhood often results in failure to thrive, and developmental delays. In adulthood these children are more prone to substance abuse, self harming, eating disorders, suicide and violent and controlling behaviours.

Consideration of attachment styles within a sports context

In order to make sense of attachment theory within a sports context the coach would have to subsume the role of 'carer'. It may then be possible to consider each of the attachment styles within a coaching context, and consider behaviour that might typify secure and insecure attachments between coach and child athlete.

Clearly the ideal relationship would be characterised by a secure attachment style whereby the coach recognised the emotional needs of the child athlete and was able to provide appropriate emotional care in response. So one could imagine a scenario in which a child has lost a competition and is upset and distraught. The coach who is

able to acknowledge the child's distress and provide emotional support and empathy would enable the child to feel safe to enter more competitions. Thus they would be better equipped to manage the traumas of losing that is part of sport competition.

The coach-child athlete relationships that could be described as avoidant- insecure attachment could also be characterised as one's where the coach fails allow the child athlete to express his/her feelings especially fear, anxiety or distress. Typical examples of this behaviour can be seen in instances where a coach defines a child as a 'wimp' or a 'cry baby' or instances where a child shows vulnerabilities. The coach thus makes it clear that this is not acceptable behaviour in sport.

The ambivalent-insecure attachment within a sports context describes a relationship whereby the child athlete is unsure of 'which' coach will be working with them on any given day. One day it might be safe for them to express their emotions, and on another day not. Ultimately, the child athlete experiences confusion and is uncertain as to how s/he should behave.

Finally, the disorganised-insecure attachment can be described in a sports context as those coaches who are simply unaware of their child athletes' emotional needs, and have no personal resources to relate to that child on an emotional level. Coaches who create relationships with their athletes on this basis may well consider the outcome to be of paramount importance, the 'win at all costs' approach could be said to reflect this type of attachment.

Overall, there may be parallels that could be drawn between Attachment Theory and coach-child athlete relationships, but these are at best speculative. It must be remembered that whilst there is considerable evidence from longitudinal studies that attachment patterns are a 'robust construct' in a family context (Soloman & George, 1999) these studies have generally examined parental relationships with children under the age of two. The age group of children participating in sport would be considerably older, and their sense of self would be predicted generally by their family circumstances rather than their sporting ones. However, it is important to acknowledge the contribution of Attachment Theory to the understanding of adult-child interactions from the child perspective.

These different theoretical approaches offer some insight into the range of perspectives that have been put forward to explain the existence of the maltreatment of children. Indeed some might be considered more relevant within a sports context than others, but as noted previously, the application of such theories remains speculative at best and therefore does not provide the underpinning for this research. Primarily, they consider the actions of the 'abuser' rather than the perceptions of child towards the adult and this is principal focus of this study.

Historical overview.

1960 - 1970

The first significant landmark in the history of exposing child maltreatment was the seminal work of Kempe, Silverman, Steele, Droegemueller and Silver in 1962 entitled 'The Battered-Child Syndrome' which put the issue of physical abuse on the map. It had a strong impact both on child support and protection, as well as encouraging further research into this phenomenon. What made this work striking was that it was hard hitting, and highlighted the first epidemiological data from hospitalised children to illustrate the issues with graphic detail. It discussed the difficulties for the medical profession in accepting that parents could abuse their own children and, as importantly, it also looked at conditions that might exist within families which could lead to this type of abuse, an area of research which previously had not been considered. This early work focused on children experiencing physical violence at the hands of their carers. Indeed, the exposure of physical abuse of children at the hands of their parents and carers was the focus of the majority of child maltreatment literature in the 1970s which extended into the early 1980s (Behl, Conynghame & May, 2002). It was as if this paper lifted the lid on a previously taboo subject, and once exposed there was no going back.

The first law to be passed which recognised children as being separate from adults, and therefore needing special legislation to protect them was the 1974 Child Abuse Prevention and Treatment Act in the United States which dealt with child maltreatment. This law highlighted several different forms of child abuse. It stated:

‘The physical or mental injury, sexual exploitation, negligent treatment or maltreatment of a child under the age of eighteen, or the age specified by the child protection law of the state in question, by a person who is responsible for the child’s welfare under circumstances which indicate that the child’s health or welfare is harmed or threatened’ (Child Abuse Prevention and Treatment Act, P.L 93-247).

However, the Act lacked precise definitions. In particular emotional abuse was defined ‘somewhat ambiguously’ (Bingelli, Brassard, & Hart, 2001, p.2) as ‘mental injury’. This resulted in considerable problems for both practitioners and researchers alike, and undermined the development and understanding of this particular aspect of child maltreatment. This problem will be revisited in more depth later in this review.

As the work on child maltreatment began to extend and develop, it is possible to highlight some key turning points which demonstrate how this field has matured and expanded. For example, an important milestone in the seventies was the inception of the first international organisation set up in 1976 to promote child welfare issues on a world stage. The International Society for Prevention of Child Abuse and Neglect, (ISCAPN) stated that its mission was: ‘To support individuals and organizations working to protect children from abuse and neglect worldwide’.

Its objectives were:

- To increase awareness of the extent, the causes and possible solutions for all forms of child abuse.

- To disseminate academic and clinical research to those in positions to enhance practice and improve policy.
- To support international efforts to promote and protect the Rights of the Child.
- To improve the quality of current efforts to detect, treat and prevent child abuse.
- To facilitate the exchange of best practice standards being developed by ISPCAN members throughout the world.
- To design and deliver comprehensive training programs to professionals and concerned volunteers engaged in efforts to treat and prevent child abuse.

To meet its second objective, the journal 'Child Abuse and Neglect' was launched in 1977 as the first specialist journal to publish work, initially from clinicians, on child maltreatment. As has been pointed out, 'most early child abuse papers were of a clinical nature, with the advent of more good research papers being relatively recent' (Oates & Donnelly, 1997 p.324). However, the journal provided a public forum for research and encouraged the debate on child maltreatment.

Initially terms such as 'child abuse', the 'battered child' and 'child maltreatment' were used to describe any range of maltreatment events that could happen to children. As the field developed researchers used more precise terms to describe particular maltreatment typologies. As a consequence the term 'child maltreatment' is now recognised as an umbrella which encompasses a range of specific types of

abuse; including physical, sexual, emotional, psychological and neglect. It has been recognised that these different types of abuse all constitute child maltreatment. However, this work of researchers, practitioners and policy makers has been hampered by 'The difficulties of defining types of maltreatment and the ambiguousness of measures used in research.' (Runyan et al., 2005, p. 462). This is particularly the case with emotional and psychological abuse and neglect.

In 1975 a review of the current state of child protection in the United States (Lewis, 1975) - which reported to the National Committee for the Prevention of Child Abuse identified a number of deficiencies that prevented the proper care of abused children, and made a number of recommendations which included:

- (1) more federal reviews of funded treatment, research, and pilot demonstration projects;
- (2) more effective systems of coordinated efforts between agencies;
- (3) development of a legislated criterion in all states of what constitutes emotional abuse and neglect of children;
- (4) the development of a psychological screening instrument which would identify family situations which are abuse prone (Lewis, 1975, p.116).

What was interesting here is that although this paper did not limit itself to one type of abuse, it highlighted the problems inherent in the conceptualisation and definition of emotional abuse. In response to this, Garbarino was the first to publish a paper that focused entirely on emotional abuse. His seminal work; 'The 'elusive crime' of

emotional abuse' (1978) was the first paper which opened up the debate and attempted to produce a more workable definition for the benefit of practitioner and researchers alike. He highlighted the fact that whilst there was a consensus as to the existence and importance of emotional abuse to date 'What is lacking in our attempts to understand emotional abuse, and thus define it in policy and practice is a suitable theoretical perspective' (Garbarino, 1978, p. 91). Thus he offered up a new theoretical concept which was anchored in four principles. The first two principles dealt with Infancy:

- Principle I: Punishment of positive, operant behaviours such as smiling, mobility, exploration, vocalisation and manipulation of objects is emotional abuse.
- Principle II: Discouraging caregiver-infant bonding is emotional abuse

Childhood and Adolescence were addressed in two further principles:

- Principle III: Punishment of self-esteem is emotional abuse
- Principle IV: Punishing interpersonal skills necessary for adequate performance in non-familial contexts such as schools, peer groups, etc. is emotional abuse (Garbarino, 1978, p. 95-96).

This moved the debate about the concept of emotional abuse forward by recognising that at various developmental stages of a child's life, emotional abuse would have different manifestations. This was an important step forward for child protection workers who suspected that emotional abuse was taking place. They were better

equipped to look for certain behavioural patterns, which could then become actionable grounds for intervention in the family. An interesting point to note is that emotional abuse and psychological abuse are used almost interchangeably throughout Garbarino's paper, a difficulty for both practitioners and researchers, and issues of definition will recur as a theme throughout this review.

Sexual and physical abuse are much easier to define as they are both tangible, and provide the possibility for corroborative evidence (Hamarna, Pope & Czaja, 2002). This has enabled practitioners and researchers to reach a consensus in what constitutes these types of abuse. Thus, emotional and psychological maltreatment is less well understood, as is shown by the way in which these two terms have been used both interchangeably and synonymously in the child abuse literature.

During this early period there was very little work that was undertaken into investigating emotional abuse as most of it was focused around physical abuse (Kinard, 1979; Kline, 1977; Roberts & Adler, 1974). However what began to emerge was the emotional and psychological effect of this type of abuse:

The physical results of child abuse are more easily recognized by the physician, but it is important for him to be sensitive and skilled in recognizing emotional sequelae, which include a poor self-image, acute anxiety states, difficulty in relating to others, and self-destructive behaviour. Emotional abuse may be as traumatic as physical abuse (Kline, 1979, p. 53).

This was an important milestone because until this point the protection of children who had experienced physical abuse was focused solely on ensuring that they were

safe from physical harm. But what now emerged was that psychological support had to be given to child victims of physical abuse (Kline, 1979). This thus recognised the need for greater awareness of the resultant emotional and psychological damage, which until this point had been largely ignored.

A further addition to the debate was the introduction of the distinction of emotional neglect from that of abuse. Whiting (1976) identified the key component of emotional neglect was when 'meaningful' adults were unable to provide the necessary nurture, stimulation or encouragement for the child throughout all its developmental stages. Whiting suggested that those actions might be unintentional through a lack of child rearing education. Consequently, emotional neglect was described as an act of omission, much like physical neglect. It was the failure to provide for the emotional needs of the child that defined behaviour as emotional neglect. As Whiting stated 'emotional neglect is a result of subtle or blatant acts of omission experienced by the child, which causes handicapping stress on the child, and is manifested in the patterns of inappropriate behaviour' (1976, p. 3). Whilst this definition does not completely separate it from emotional abuse, the distinction is noteworthy.

In 1979 the British Association for the Study and Prevention of Child Abuse and Neglect was established. This was the first UK based organisation to have research and into all aspects of child maltreatment as its focus. The objectives were stated as:

1. To protect children from suffering, or likelihood of suffering significant harm, ill-treatment, impairment of health or impairment of development by the encouragement and promotion of any methods, services and facilities calculated to safeguard and promote the welfare of such children
2. To educate and inform the public at large and, in particular, but not exclusively, those persons professionally qualified in any relevant field in all aspects and effects of abuse and neglect on children generally.

The primary means for the dissemination of information for professionals working in the field was through the journal 'Child Abuse Review', which was launched in the same year. This quickly established itself as the focus for British based research, and professionally orientated papers in this area.

1980 - 1990

This period saw significant developments in terms of research, legislation and child protection practice. In England 1980 was the first year that emotional abuse was introduced as a discrete category on the child abuse registers. (Department for Health and Social Security, 1980) This was an acknowledgement that emotional abuse could exist on its own, as well as being observable as a consequence of other abuse typologies. Emotional abuse occurred when 'children under the age of 17 years whose behaviour and emotional development have been severely affected;

where medical and social assessments find evidence of either persistent or severe neglect or rejection.’ What this addition indicated was that there was a need to ensure that a child’s emotional wellbeing was taken into consideration, not just their physical health.

Once mental injury had been included in the US statute describing child abuse more clarity was needed. In effect, this was because there was a lack of consensus about what actually constituted ‘mental injury’, causing confusion and difficulties for professionals involved in the process of enforcing the law. This was finally recognised in 1980 when the National Centre on Child Abuse and Neglect (NCCAN) established the following categories of ‘emotional maltreatment’; verbal and emotional assault, close confinement, inadequate nurturance and affection and knowingly permitting maladaptive behaviour. However this attempt at definition had actually created ‘enormous ambiguity and confusion’ (Holder, Newberger, & Loken, 1983, p. 301), and was identified as the central issue that plagued much of the work in this area for both researchers and practitioners alike. These somewhat broad definitions were due to the wide variety of behaviour and circumstances in which psychological maltreatment occurred. As a consequence the landmark International Conference on Psychological Abuse of the Child was held in 1983 with a primary aim to unify practitioners and researchers with a generic definition that would satisfy all concerned parties. The conference produced a generic definition of *psychological maltreatment*:

Psychological maltreatment of children and youth consists of acts of commission and omission, which are judged on the

basis of a combination of community standards and professional expertise to be psychologically damaging. Such acts are committed by individuals, singly or collectively, who by their characteristics (e.g., age, status, knowledge and organisational form) are in a position of differential power that renders a child vulnerable. Such acts damage immediately or ultimately the behavioural, cognitive, affective or physical functioning of the child. Examples of psychological maltreatment include acts of rejecting, terrorising, isolating, exploiting and mis-socialising (Proceedings Summary, 1983, p. 2).

This definition provided the framework from which later refinements and advancements were made. Most notable was the seminal work 'The Psychologically Battered Child' by Garbarino, Guttman and Seely in 1986 which gave an in depth description of psychological maltreatment maintaining it as a 'concerted attack on the child's development of self and social competence.... a pattern of psychically destructive behaviour' (p. 67). This was the first text to highlight the devastating impact of psychological maltreatment on children, with the aim of exposing the damage that can occur even when there was no physical harm. They wanted to place psychological maltreatment firmly at the heart of child protection, rather than as an 'ancillary issue' (Garbarino et al's., 1986, p. 7). This text took a developmental perspective as its central premise and developed many of the themes and ideas presented in Garbarino's original 1978 paper through case studies. It was written primarily for professional practitioners as a means to aid their work through conceptual discussion and practical application. Key areas addressed were; defining, identify, assessing and intervening in cases of psychological maltreatment. For child protection professionals the identification of abuse was a central part of their work; in order to improve this, Garbarino et al's. furnished practitioners with a framework

of behaviours that might constitute psychological maltreatment. They identified a number of components which they presented as being at its core. These included; rejection, isolation, humiliation, ignoring, scape-goating (blaming), verbal attacks/shouting, threatening/terrorising and belittling. All can damage a child's development and emotional growth as a person. The work of Garbarino et al's. was acknowledged as one of the most influential texts on contributing to the development of the child maltreatment literature by raising awareness of the most prevalent and destructive form of child abuse (Hart & Brassard, 1987).

In 1987 another important publication which helped to move the understanding of emotional and psychological abuse forward was; *Psychological Maltreatment of Children and Youth* (Brassard, Germain & Hart, 1987). The editors were the then directors of the Office for the Study of Psychological Rights of the Child, a centre which sought to 'clarify and promote children's psychological needs' (p. xi) and was responsible for spearheading the 1983 conference previously mentioned. The book is a culmination of many of the papers presented there, and it is pertinent to discuss a number in detail.

In their opening paper, Hart et al. focused on setting the scene for the then current status of knowledge, research findings, and conceptual issues. They referred to the term 'psychological maltreatment' almost as an umbrella term that included; mental cruelty, mental injury and emotional abuse. However, it is also pertinent to note that research papers within the book utilise a range of terms including; 'emotional

neglect' (Schakel, 1987), 'psychological abuse' (Reschley & Graham-Clay, 1987), and 'emotional abuse' (Corson & Davidson, 1987). Their paper highlighted a number of different aspects including; descriptions, definitions, incidence, impact and outcomes of psychological maltreatment. In describing and defining psychological maltreatment, they referred back to their 1983 conference summary statement, (see above). One of the major problems that they identified was the reporting of incidence figures that might be used to indicate the scale of the problem. They cited two different organisations responsible for the collating of such data: the American Humane Association and the National Study of Incidence and Severity of Child Abuse and Neglect. There was a considerable discrepancy in the very 'conservative estimates' (p. 8) of psychological maltreatment with the first reporting 103,000 cases and the second reporting 200,000 cases of psychological maltreatment in the same time-frame. As they pointed out, this 'discrepancy may be due to differences in definitions used, and/or differences in data-gathering procedures' (p. 8). At the heart of this problem was the lack of a clear understanding of the term. Moreover, they reiterate this in their summary paper in the book by stating ' The absence of an operational definition of psychological maltreatment and its subcomponents is the single greatest obstacle to research, legal intervention and the development of social policy regarding psychological maltreatment' (p. 255). They made the point that it is only through good evidence-based research that this can be redressed.

Their paper also addressed current knowledge regarding the possible impact of psychological maltreatment on children. Whilst they acknowledged that limited data existed, what was emerging was a picture of damage that impacted beyond childhood. They cited a number of possible consequences that included: habit disorders, conduct disorders, neurotic traits, psychoneurotic reactions, behaviour extremes, attempted suicide. As they stated 'expert opinion seems generally in agreement that psychological maltreatment is potentially destructive to the quality of life of young people' (p. 10). However, they indicated that the paucity of empirical data on the impact of psychological maltreatment had hampered effective interventions and protection of vulnerable children.

In their paper, Garbarino and Vondra (1987) made a valuable contribution to the debate because, while they reiterated much of what Hart et al. (1987) had highlighted with regards to lack of stability in reporting incidence due to poor operational definitions, they raised some important additional issues. They maintained that psychological maltreatment should be placed at the 'centerpiece' of efforts to protect children, because it is the psychological consequences that define an act as being abusive. This can be illustrated by considering one act of physical harm; a child accidentally falling over and bruising their arm, or the same injury inflicted on them by a parent. In this instance it is not the injury itself but rather the emotional context within which it was sustained that is the defining aspect. These observations have been supported by Ney (1987) who studied the impact of verbal abuse on children compared with other forms and concluded with the clinical

impression that verbal abuse could be more damaging to a child than actual physical abuse.

They moved the debate forward by considering two distinct domains of psychological maltreatment which they termed 'Direct' and 'Indirect'. They described direct psychological maltreatment as acts that were specifically targeted at the child. Within this sub category rejection, emotional neglect, and verbal attacks were mentioned as typifying behaviour. In particular rejection was seen to be a universally unacceptable behaviour for a parent. Reference to the cross-cultural work of Rohner and Rohner (1980) was made to illustrate this point. Indirect psychological maltreatment was described as taking place where it was not specifically focused at the child, but occurs as a by-product of other actions or environments. Key examples of this included; children witnessing violence between their parents, egocentricism on the part of the parents rendering them incapable of putting the needs of their children before their own whereby children become 'psychological victims of adult self-interest' (p. 34), commercial or status orientated exploitation and maladaptive socialisation. These distinctions were important as they widened the debate and paved the way for a better conceptual understanding. However, as they stated 'the scientific challenges here are staggering' (p.27).

The last key paper from this text that needs to be considered was the contribution from Navarre (1987) entitled; 'Psychological maltreatment: The core component of child abuse'. As the title suggested, this theoretical paper focused on establishing

psychological maltreatment as the underpinning factor in all other types of maltreatment. She again restated the central theme of the need for a specific workable definition of psychological 'abuse'. In doing so she made the point that this term had been used as a 'residual' category, almost as a catch-all for abuse that did not seem to fall into other, better defined categories of physical and sexual abuse. To this end she proposed a three-dimensional construct that considered; action, outcome and intent which could be applied to any type of abuse, but which then went on to refer specifically to psychological abuse. With respect to 'action', Navarre stated that actions can be defined as adverse on the 'basis of probability of an aversive outcome' (p. 45) in that some actions will have a high probability of damaging children even if they are not directly observable and the damage only manifests itself much later. She put forward the notion of a continuum of aversion from mild to severe which may cause 'irreversible damage' (p. 45). However, she warned against the assumption that only severe action could lead to a severe outcome stating 'frequent and/or repetitive mild acts could also lead to a severe outcome' (p. 46). Thus the mediating factors in determining an action as abusive were intensity, duration and frequency. The second dimension considered was outcome which was inextricably linked to the action. Negative consequences of certain actions could be seen in specific outcomes, though Navarre maintained that it was the subjective meaning that an individual assigned to an action which determined its perceived outcome. She acknowledged individual differences in children's ability to be 'stress resistant' to their parental behaviour, and thus reflect differences in perceptions of adult behaviour.

The last dimension is 'intent' which was described as 'the most difficult to measure objectively or demonstrate legally' (p. 47). There were many instances where intent was not always clear even to the adult; indeed some adverse actions were made with the apparent best interests of the child at heart. Navarre identified five factors that needed to be considered with respect to intent. These were;

1. When the intensity and/or duration of the act is grossly out of proportion with the intended outcome.
2. When the actor's understanding of the victim's needs or behaviour is inaccurate and inappropriate.
3. When the actor has a distorted view of reality that interferes with actors ability to predict the outcomes of his/her own actions accurately or to recognise his/her own involvement in the situation from which the action arises.
4. When the actor's perceptions of both the interaction taking place and the intensity of the actors own response are distorted by a personal emotional need.
5. When the abusive act is so common and acceptable that in the culture or the community that probability of a negative outcome is neither recognised nor believed (p. 47).

In considering these factors, the issue of intent (which may have initially appeared to be straight forward) becomes even more clouded. Navarre summarised her paper by

saying psychological abuse was multifaceted and had many interacting variables all of which needed to be considered and fully explored. Navarre clearly made an important contribution to the understanding and conceptualisation of psychological maltreatment but one caveat to this would be that, whilst predominately she referred to psychological maltreatment to explain the phenomenon, she also used as terms psychological and emotional abuse well.

Overall the contribution of these authors to the development of this subject cannot be underestimated. They provided the conceptual and theoretical underpinning from both research and practice have grown.

Notwithstanding, in UK there were also developments in child protection policy and practice, which, with respect to emotional abuse, followed a similar path to the US experiences; both physical and sexual abuse were given more prominence, with emotional abuse included later. In the UK, children who are considered at risk are placed on the Child Protection Registers under one or more of the categories of abuse, including emotional abuse. However, this has only been recognised as a separate form of child abuse since 1980 and this was not acknowledged in legislation until the 1989 Children Act which was the culmination of a series of Acts aimed specifically at the protection of children (This began as early as 1889 with the 'children's charter' aimed at protecting children from child labour the 1908 Children's Act which was followed in 1932 by The Children and Young Persons Act subsequently modified several times later. Each piece of legislation demonstrated a

more sophisticated understanding of the issues facing children and importantly young people).

The 1989 Children Act laid down that:

An actual or likely severe or adverse effect on the emotional and behavioural development of a child caused by persistent or severe emotional ill-treatment or rejection. All abuse involves some emotional ill-treatment. This category should be used where it is the main or sole form of abuse (Department of Health, Education and Science 1989, p. 49).

This act became the framework for significant policy changes in the UK. Child protection workers were now given the powers for intervention solely on the basis of identification of emotional abuse. However, they were still left with the dilemma of defining emotional abuse and putting this act into practice.

What also became apparent was that during this period an Atlantic divide in the use of terminology emerged with England favouring the use of 'emotional abuse', and American literature using the term 'psychological maltreatment'. However, when operational definitions were considered, consensus would appear to exist even if the labelling is different.

In summary the eighties were significant for changing perceptions and understanding of the consequences of emotional abuse which has impacted on child protection practice world-wide. Whilst this period was largely bereft of empirical research per se, these key authors were, and still are, considered to have created much of the theoretical underpinning for the work that followed.

1990 - 2000

The last decade of the 20th century saw considerable growth in empirical based research, and some of the key papers will be reviewed here.

One of the first significant studies that provided strong evidence to support the notion that psychological maltreatment lies at the heart of all other types of maltreatment came from Clausen and Crittenden in 1991. In their extensive study of physical and psychological maltreatment they explored the relationships between them. Using a range of assessment methodologies two distinct types of families were investigated. The first were families who had been 'reported' as part of state-mandated child protection teams (N=175), the second were families who were termed 'community' families where no incidences of any type of abuse had previously been identified (N=176). The focus of the investigation was on children between the ages of 2 and 6. The assessments were made through observations and interviews with families on 2-6 occasions. Five point-rating scales were used to assess child outcomes in the following categories; two types of physical maltreatment identified as physical injury, physical neglect, and three types of psychological maltreatment identified as social/emotional neglect, cognitive neglect and emotional abuse. Their findings revealed that in 89% of cases from 'reported' families' physical and psychological maltreatment co-occur. In 'community' families this rose to 90%. They found that the severity of physical neglect related to cognitive and social/emotional neglect. From this they concluded that there was a

greater detrimental effect from physical neglect compared to physical abuse. They described the implications from their findings in the following way; ‘the co-occurrence of psychological maltreatment with physical maltreatment suggests the need to assess systematically the evidence for psychological maltreatment for all cases of physical maltreatment’ (p. 15). They also pointed out that cases of psychological maltreatment were generally not reported. This meant that a considerable number of children would remain undetected and undiagnosed. In 1991, Vissing, Straus, Gelles and Harrop conducted a large telephone study to investigate the prevalence of verbal/symbolic aggression parental behaviour towards their children. It was defined as; ‘communication intended to cause psychological pain to another person or a communication perceived as having that intent’ (p. 224). Examples of questions included such behaviour as ‘name-calling’ or swearing, ridiculing. The behaviour identified largely fit into the psychological maltreatment definition of belittling, terrorising and ignoring as identified by Garbarino et al’s. (1986). The 3,458 participants revealed that 63% had used this type of behaviour at least once in the previous year. Based on their findings they sought to determine incidence rates of verbally abused children. Vissing et al. produced three different criteria to extrapolate the incidence rates of verbal aggression. They calculated that of children who had experienced this 10 or more times in a year, the rate was 267 per 1,000 (or 26.7%). For children who experience this 20 or more the rate was 138 per 1,000 (or 13.8%). However, if the criterion is set at 25 or more the rate was 113 per 1,000 children (or 11.3%). Whilst this study only focused on a small component

of psychological abuse as previously defined, it does raise questions when verbal aggression becomes acknowledged as abusive.

Gross and Keller's (1992) study utilised a retrospective methodology as a means of accessing childhood experiences. Their primary focus was to identify the prevalence of physical and psychological abuse in college students. Garbarino et al's. behavioural framework was used to define psychologically abusive behaviour. 260 college student participants were asked to review their childhood experiences in the light of specific questions; for example 'were you belittled as a child?' A frequency scale ranging from 'never' to 'all the time' was used to determine if psychological abuse was deemed to have taken place. When a participant responded in the affirmative to a specified range of behaviours psychological abuse was judged to have taken place. Results indicated that 20.61% (47) were classified as having a history of psychological abuse, 9.21% (21) were classified as having a history of physical abuse, and 7.46% (17) were identified as having childhood histories of both psychological and physical abuse. The authors determined that there was a 37.28% prevalence rate of psychological maltreatment compared to a 16.67% rate for physical abuse. This was due to the fact that even where subjects were identified as primarily being victims of physical abuse psychological abuse was always present often to the same extent as in the psychological abuse group. One could question this distinction by challenging the definition of 'just' physical abuse group as clearly no such experiences existed because it never occurs in isolation. This would then re-

define the groups into psychological abuse and combined abuse. In effect this is what the total psychological prevalence rate is indicating.

A similar retrospective methodology was adopted by Moeller, Bachman and Moeller (1993) when they investigated prevalence rates of emotional, physical and sexual abuse. The sample population was 668 middleclass, white women from a broad age range of 16-76, (mean 33.6 years). A self-administered questionnaire was used to identify their childhood experiences. Emotional abuse was defined largely in accordance to Garbarino et al's. framework, but also included items relating to life-endangering events such as 'having a gun held to the head of a child'. Their findings revealed that of the total sample 53% met the criteria for having been abused across all abuse typologies. Of these 37% met the criteria for having experienced emotional abuse- again reinforcing previously expressed views (Brassard et al., 1987; Garbarino et al's., 1986; Navarre, 1987) that psychological maltreatment is at the core of all child abuse.

Following on from their work in 1995 the American Professional Society on the Abuse of Children (APSAC) produced guidelines which built upon the sound theoretical foundations laid down by Garbarino et al's. (1986). These are presented below, and contain all of the facets of psychological maltreatment previously defined, but also provide a broad enough definition to encompass a range of behaviours.

- ‘Psychological maltreatment’ means a repeated pattern of caregiver behaviour or extreme incident(s) that convey to children that they are worthless, flawed unloved, unwanted, endangered, or only of value in meeting another’s needs (APSAC, 1995, p. 2).
- Psychological maltreatment includes (a) spurning, (b) terrorizing, (c) isolating, (d) exploiting/corrupting, (e) denying emotional responsiveness, and (f) mental health, medical and educational neglect (ASPAC, 1995, p. 4).

Early work that examined child maltreatment often focused primarily on physical abuse because it was thought to be more damaging than psychological maltreatment.

However, more recently this has been shown not to be the case (Kaplan et al., 1999; Starr, Maclean & Keating, 1991). Indeed research has shown that emotional abuse is a stronger predictor of a number of problems which include; social impairment, low self-esteem, suicidal behaviour and disordered eating (Kent, Waller & Dagnan, 1999; McGee, Wolfe & Wilson, 1997; Mullen, Martin, Anderson, Romans & Herbison, 1996). Gracia (1995) identified this problem when an investigation was undertaken concerning cases of child maltreatment reported as ‘not serious enough’ to warrant more formal attention which often included emotional abuse. Through psychological testing children who were described as emotionally ‘flat’ or ‘withdrawn’ had actually experienced over along period of time sustained and repetitive inappropriate responses, such as rejection and verbal abuse. These children could be said to be exhibiting emotional compliancy by simply expressing very little

emotion at all, but generally they were not identified by child protection mechanisms.

The most common symptomatic outcomes found with children exposed to emotional/psychological abuse have been eating disorders, substance abuse, aggressive behaviour, withdrawal, criminal activity, suicide and self harm (Doyle, 1997). Moreover, children who have experienced emotional abuse often feel a sense of abandonment, helplessness, isolation, and exhibit overly compliant behaviour and are self-blaming (Tomison & Tucci, 1997). These conditions are not to be taken lightly; 'Emotional abuse scars the heart and damages the soul. Like cancer, it does its most deadly work internally. And, like cancer, it can metastasize if untreated' (Vachss, 1994, p. 1).

O'Hagan (1993) therefore suggested more research should be undertaken as the serious effects of emotional abuse and psychological abuse had been underestimated. As his findings indicated, professionals encounter twice as many of these cases when compared to sexual or physical. However, as previously mentioned, it is very hard to intervene or prosecute on the basis of emotional abuse alone.

It is only through observable behaviour that it is possible to access other people's emotions. These observable emotions are in evidence in very young babies who are able to indicate distress, pleasure, sadness, anger and disgust. (Vasta, Haith &

Miller, 1999). But they also pointed out that emotions did not emerge 'simply as the result of a biological timetable' (p.449), rather their development was crucially influenced by social and cultural experiences. It is this aspect that O'Hagan (1993) believed to be important; 'the ability to express emotions adequately and appropriately is a crucially important aspect of development' (p.23).

Emotional development in childhood depends largely on the quality of care and the frequency with which it was given by the significant adult. Consequently, the appropriate emotional responses should be shown to the child by the carer validating the original emotional response of the child (Bowlby & Ainsworth, 1992). Over time these interactions refine and model the child's emotional expressions. As a result, the child becomes socialised emotionally and is able to express himself or herself appropriately in later life (O'Hagan, 1993). However, if an appropriate level of care is not present it can lead to a delay in emotional development or, more seriously such delay can be indicative of emotional abuse. Moreover, if a child experiences repeated inappropriate emotional responses from significant adults around them s/he may also learn that expressing emotions can be a dangerous endeavour. It is a clear signal of emotional abuse if such behaviour was sustained, or repetitive (O'Hagan, 1995). This does not imply that every carer who gives their child an inappropriate response is being abusive; it is a matter of frequency. The inappropriate response from the care giver had to be 'sustained' and 'repetitive' gradually to discourage the child from expressing that particular emotion again. What can be seen is a form of emotional compliance which might be exactly what the abusive caregiver demands.

It can also have the reverse effect in which the child may overuse that particular emotion e.g. becoming overtly aggressive in a situation which does not warrant that behaviour. However, the advantage that this response has over that of these children incapable of expressing their emotions is that they will be noticed and therefore have a much better chance of detection, intervention and possibly therapy. Whatever the child's response to this form of treatment their emotional life will seriously distort and impair their understanding of emotion - leading to serious problems with socialisation in later life.

O'Hagan (1995) offered a useful definition of emotional abuse:

Emotional abuse is the sustained, repetitive, inappropriate emotional response to the child's experience of emotion and its accompanying expressive behaviour. Emotional abuse repeatedly inflicts emotional pain upon the child (e.g. fear, humiliation, distress, despair). It inhibits a child from spontaneous, appropriate, positive, emotional feeling and emotional expression. Emotional abuse will have serious adverse effect on the child's social development and social life (p. 456).

'Psychological' or the word 'psychology' refers to the mind; 'psychological development' therefore is the development of crucial mental processes and faculties which we describe as cognition. 'Cognition embraces all those ways in which the knowledge of the world is attained, retained, and used , including memory, attention, perception, language, thinking, problem-solving and concept attainment' (Gross, 1987, p. 5).

The term psychological abuse was rarely used in child abuse literature, as it appeared to come under the guise of various phrases all having psychological undertones. But it is worth making the distinction because, in much the same way that no-one would consider emotional and psychological development to be the same, so emotional and psychological abuse were not the same (O'Hagan, 1995).

O' Hagan (1993) defined psychological abuse as:

Psychological abuse is the sustained, repetitive, inappropriate behaviour which damages or substantially reduces the creative and developmental potential of crucially important mental faculties and mental processes of a child; these faculties and processes include intelligence, memory, recognition, perception, attention, imagination and moral development. Psychological abuse impedes and impairs the child's developing capacity to understand and manage it. Psychological abuse greatly confuses and/or frightens the child, renders her more vulnerable, less confident, and will adversely affect her education, general welfare and social life (p. 458).

The differentiation of the two terms; emotional and psychological abuse appear to be almost negligible, but closer inspection reveals that this was simply not the case. Indeed the distinctions were important, yet generally overlooked.

Hence O'Hagan (1995) pointed out that there were clear differences between emotion and its functions compared with psychological functions. Consequently, the notion of emotional abuse that it damaged an individual's emotional landscape leaving residual feelings of unworthiness or shame, was fundamentally different from psychological functioning. However, that does not mean that they were always separate experiences. As O'Hagan pointed out; 'it is highly probable that the

perpetrator who is abusing the child emotionally will to some extent also be abusing the child psychologically and vice versa' (p. 458). This could partially explain why there still existed confusion over these terms, and they were used synonymously, because the separation was very hard to achieve especially for practitioners and prosecutors.

The child protection registers in England are a useful barometer of how professionals working within the field of child protection were applying the legislation and it inevitably became the anchor for research carried out in the UK. Emotional abuse was the lowest category of registrations during the period March 1997 to 2000: however whilst there was an overall decrease in total registrations of abuse the figures for emotional abuse rose.

Registrations for emotional abuse and number of children registered for emotional abuse 1997-2000 in England (Department of Health, 2001) are shown in Table 2.1.

Table 2.1 *Registrations for emotional abuse and number of children registered for emotional abuse 1997-2000 in England (Department of Health, 2001)*

Year	Total number of registrations	Registrations for emotional abuse years ending 31 st March 1997-2001	% of total registrations	Total number of children on register as at 31 March 1997-2001	Children on register for emotional abuse	% of children on register
1997	29,200	4,200	14	32,400	5,100	16
1998	30,000	4,800	16	31,600	5,200	16
1999	30,100	4,800	16	31,900	5,400	17
2000	29,300	4,800	17	30,300	5,500	18

An important study that focused on how children came to be placed on the child protection register under the category of emotional abuse was carried out by Glaser and Prior (1997). Their study focused on 94 children from 54 families who were on the register either solely under the emotional abuse category (54%) or jointly with another form of abuse (46%). The study utilised data from case conferences which decided on the status of a child on the register. The key questions asked were; what are the antecedents of emotional abuse, what were the reasons children were placed on the register under this category, and what had been achieved through this process? Their findings revealed that there were three main reasons why children were on the register; parental attributes (i.e. mental ill-health, domestic violence, drug and alcohol abuse) which accounted for 68% of the registrations; forms of ill-treatment which accounted for 41% of registrations and included denigration, rejection, emotional unavailability and developmental inappropriate interaction; and indicators of impairment to a child's development which included emotional state, behaviour, educational attainment and peer relationships. Interestingly this study highlighted the fact that the majority of children were placed on the register based on observable adult behaviours, much in the same way that evidence of physical abuse might have been collaborated. The important point that Glaser and Prior raised is that 'emotional abuse refers to a relationship rather than a series of events' (p. 315). With this distinction they maintained that the manner in which it is addressed by child protection policy, including the use of the registers; have to be re-examined to take this into account. This was supported by Ayre (1998) who maintained that in

long-term chronic cases of abuse such as emotional abuse the current child protection system was inadequate.

Further study of children on the child protection register undertaken by Doyle (1997) revealed that it was the 'fear-inducing' behaviour of the primary carer that was most often cited as reasons for children to be registered under the category of emotional abuse (95% of children affected). Other categories of caregiver abusive behaviour experienced by these children were as follows: inappropriate roles (92%); rejection (86%); isolating (54%); degrading (53%); ignoring (28%); corrupting (19%), tormenting (18%), (1997, p.336). Whilst this research did not explicitly utilise Garbarino et al's. framework of behaviours it clearly added weight to its validity.

Whilst research using child protection registers in the UK have aided the understanding of the dilemmas facing practitioners managing cases of child welfare, this was not only identified as problematic in the UK, but also in Australia where research has highlighted variations between State and Territory child protection policies, legislation and practice. In much the same way that there are variations reporting of emotional abuse in America and the UK, so the problem exists elsewhere. Research by Tomison and Tucci (1997) identified that reporting rates ranged in 1988-1989 from a 48.3 % to 3.0% across different states and territories in Australia. Once again the variations were assumed to be because 'even within Australia child abuse is defined differently' (Goddard & Carew 1993, p. 208).

2000 - 2008

Following on from the work undertaken in Australia a number of studies investigated the legal ramifications of protecting children from emotional abuse. The ultimate test of any law is how effectively perpetrators of the maltreatment can be prosecuted. A number of key researchers (Hamarman, Pope & Czaja, 2002; Glaser, 2002) have highlighted this problem with particular respect to emotional abuse. What emerged from research from North America, England and Australia was a lack of consistency in the legal definitions. In the case of North America there were state-wide differences in the statutes that relate to psychological maltreatment, and as a consequence, there were considerable differences in the rate of reporting (Glaser, 2002). A comprehensive review of the state laws revealed that there was a 300-fold variation in the rates of child emotional abuse which ranged from 0.37 per 10,000 children to 113.02 per 10,000 children (Hamarman et al., 2002). These figures caused more concern when they were compared to physical and sexual abuse- the variation were 12-fold and 13-fold respectively. The authors concluded that 'inconsistencies in the laws against emotional abuse are the driving factor for the variation in rates observed' (p. 308). These inconsistencies were created due to a number of fundamental impediments: What was the proof that emotional abuse has taken place and damaged a child? How could emotional abuse impact on the termination of parental rights? How could courts find evidence that parental behaviour had an adverse effect on a child? These questions were very difficult to answer and, as a consequence, legislators did not intervene. This again reflects the continuing problem of a lack of consensus in defining emotional abuse and might

result in children having to continue to endure abuse because no-one could 'prove' it was happening. Thus it would appear that the problems identified in the eighties still remain largely unresolved.

Creighton (2004) identified that the most popular analogy used for child abuse was that of an iceberg, where only a portion of the whole was visible. She divided the iceberg into layers:

- Layer 1: Those children whose abuse is recorded in the criminal statistics of a country.
- Layer 2: Those children who are officially recorded as being in need of protection from abuse, e.g. children on Child Protection Registers in England or substantiated child abuse cases in the USA.
- Layer 3: Those children who have been reported to child protection agencies by the general public, or other professionals such as teachers or doctors, but who have not been registered.
- Layer 4: Abused or neglected children who are recognised as such by relatives or neighbours, but are not reported to any professional agency.
- Layer 5: Those children who have not been recognised as abused or neglected by anyone, including the victims and perpetrator (p. 1).

If one considers this analogy for all types of abuse there would exist large numbers of children in layer 5. If this model is considered solely within the context of

emotional abuse it is apparent that children who have been emotionally abused represent the greatest numbers.

Further evidence of this was provided through an examination of the literature from 1977 to 1998 (Behl et al., 2003) which revealed that during this significant period there have been changes in the type of child maltreatment that have been addressed in key research articles. In their study which examined over two thousand articles in key journals the percentages for the different types of maltreatment reported were as follows: Child physical abuse 14.2%, Child sexual abuse 43%, Child neglect 2.4% and for Child emotional abuse 0.8%. (The remaining 43% of articles did not address child maltreatment) Articles that did not distinguish between maltreatment types has significantly decreased over time indicating a greater sophistication in both the theoretical understanding of the different maltreatment types, and quantitative research data available to help describe them. Moreover, the annual percentage of articles that examined child physical abuse decreased over time whilst the number of papers on child sexual abuse increased. However and, perhaps most significantly, the number of articles on child emotional abuse remained consistently low throughout the 22 year period (Behl et al., 2003). The authors suggested some possible reasons why this might be the case. These include the difficulty in both defining and applying the concepts of child emotional abuse and child neglect which make it difficult for researchers to work with. There was also a misconception that child emotional abuse had a less damaging effect than child sexual abuse or child physical abuse. (Hoffman-Plotkin & Twentyman, 1984; McCurdy & Daro, 1994). What was most apparent was the gap in the research which examines emotional

abuse, and a need for 'further theoretical and research articles to enhance the understanding of child neglect and child emotional abuse'. (Behl et al., 2003). Work in this area had been directly hampered by 'The difficulties of defining types of maltreatment and the ambiguousness of measures used in research remain a concern for researchers, practitioners and policymakers' (Runyan et al., 2005, p. 462). However, it had long been recognised that emotional abuse still presents itself in the literature under a number of different terminologies (Chahal et al., 2005; Hamarman et al., 2002), often with psychological maltreatment considered as the umbrella term from which a number of components, including emotional abuse, emerge. This is particularly the case with emotional and psychological abuse and neglect. As Sheehan stated 'The uncertainty that surrounds recognising and defining emotional abuse and neglect, and uncertainty about it legally' (2006, p. 39) makes it very difficult for child protection workers and researchers alike.

However, one can conclude that in the UK the term 'emotional abuse' is the accepted term, whilst in the US 'psychological abuse or maltreatment' is more generally referred to. This reflects the different emphasis that has been put on the term with respect to the development of literature within the area. (Cawson et al., 2002). For the purpose of this research the term emotional abuse shall be used, using definition employed by the Department of Health employs the following definition:

'Emotional abuse is the persistent emotional ill-treatment of a child such as to cause severe and persistent adverse effects on the child's emotional development. It may involve conveying to children that they are worthless or unloved, inadequate, or valued only insofar as they meet the needs of another person. It may feature age or developmentally

inappropriate expectations being imposed on children. It may involve causing children frequently to feel frightened or in danger, or the exploitation or corruption of children. Some level of emotional abuse is involved in all types of ill treatment of a child, though it may occur alone (Department of Health et al., 1999, p. 5-6).

In order to understand the development of the theories of emotional abuse it was appropriate to adopt a chronological approach to the review, however this is not the case with respect to the next sections where the literature will be discussed in relation to specific topics.

Child Maltreatment in Sport

The major changes in awareness and understanding in relation to child protection have primarily focused on relationships in the family, which were perceived as being the main source of the problem. Little or no attention has been paid to the same issues in relation to children participating in sport. The widely held view that sport is a desirable activity for children to be involved in is one that prevails. As Donnelly (1997) identified 'participation is widely believed to cultivate moral and ethical character by requiring self-discipline, organisation, hard work and goal orientation' (p. 396). Thus sport is presented as a desirable pastime which should be encouraged, especially now in the climate of concern over childhood obesity where sport is seen to provide the answer. Children who participate in sport are very rarely seen to be a vulnerable population, and are certainly not considered to be 'at risk'. As a result sport has tended to operate outside many of the statutory constraints that are in place

on other organised child care facilities such as schools, residential care homes and nurseries.

This tradition of independence was succinctly expressed over twenty years ago by the British Central Council for Physical Recreation (CCPR) who stated

This country is probably one of the very few in the world where sports enthusiasts can determine for themselves policies and strategies without interference or domination from national government (CCPR Annual Report 1985, p. 6).

However, there have been some landmark events in sport which have started to alter the public perception of sport and to which sports organisations have had to respond to. These have centred mainly on sexual abuse cases, and have been instrumental in creating a shift away from the untarnished image that sport traditionally enjoyed. The first of these occurred in Canada when a professional ice-hockey coach was convicted of sexual offences against a respected player. In Britain in 1993, Paul Hickson, a former Olympic coach, was charged with sexual offence against teenage swimmers whom he coached. In all he was convicted of 15 sexual offences and sentenced to 17 years imprisonment. This was a turning point when suddenly sexual exploitation in sport had to be acknowledged. Whilst these cases could be considered alarming, there is a lack of literature that explores the nature of the relationships between elite child athletes and their coaches. As Brackenridge states; 'Despite the fact that advocacy work for better standards of athlete care had been underway for some ten years or more in Britain prior to his arrest, there had been little in the way of official responses to the issue' (2001, p. 17). Indeed even as late

as 1999, over half of National Governing Bodies who were receiving government grant aid from Sport England had no policy for the protection of children in their sport. (NSPCC, 1999, cited in Brackenridge 2001).

National Governing Bodies of Sport (NGB's) tried to respond to the problem by developing anti-harassment and child protection policies. One of the emergent themes was in the area of coach education as a means to start to address the issue. Collaboration between the National Coaching Foundation (NCF) and the NSPCC resulted in 'Protecting Children-A Guide for Sportspeople' written in 1995 by Maureen Crouch. This partnership then strengthened and numerous other courses and materials were developed to help inform coaches and promote 'safe' practice. This in turn resulted in 1999 with the National Child Protection in Sport Task Force, which was launched by Sport England and was tasked with developing meaningful action plans to combat child maltreatment in sport. Subsequently there is now the Child Protection in Sport Unit that exists within the NSPCC solely to tackle issues of child maltreatment and to help NGB's establish effective child protection policies and structures.

Any child protection policy or practices should 'uphold the human rights of the child, and the *best interests of the child* should always be the primary consideration' (David, 2005). This is the message firmly at the forefront of the United Nations Convention on the Rights of the Child (1990), which proclaimed that 'childhood is entitled to special care and assistance'. Sport is not exempt from this; the convention

embraces every aspect of a child's life. However, currently the knowledge and awareness that exists about the human rights of young athletes is limited (David, 2005). But it is a useful exercise to contextualise child maltreatment in sport within the wider framework of childhood human rights.

Below Table 2.2 summarises the current known status of child maltreatment in sport in relation to specific relevant articles from the UN Convention on the Rights of the Child. Although it was acknowledged by the author that; 'limited awareness about the human rights of young athlete in the context of competitive sports results logically in limited research and data on the issue. In turn, awareness is hindered by the weakness of data collection and research' (David, 2005).

Interestingly the amount of research that is currently available under each of the abuse categories presented above reflects the same trends that are in evidence in child maltreatment literature in general. Indeed, the 'very scarce' research presented in the table for psychological abuse included the published paper of Study One of this research (Gervis & Dunn, 2004).

However, there have been two research papers (Stirling & Kerr, 2007; 2008) that have focused on emotional abuse in sport. These papers focused on the retrospective experiences of fourteen elite female swimmers and explored through open-ended interviews their relationship with their coach. They provided strong support for the occurrence of emotional abuse by their coaches. Stirling and Kerr (2008) proposed that this emotional abuse occurred in three ways; through physical behaviours,

verbal behaviours and the denial of attention and support. They also identified that the perception of the emotional abuse varied with respect to the athlete's performance levels, and at different stages in the athlete's career. Whilst these papers do provide evidence for the existence of emotional abuse within an elite sports context, it must be stressed that the data used formed the basis of both papers. Furthermore, the structure of the interview guide was not anchored to any theoretical underpinning from child maltreatment research.

Table 2.2 *Extracts from; Child Rights and Violations in Competitive Sport; Knowledge and Awareness. (David, 2005, p 11)*

Situation	Convention of the Rights of the Child	Geographical Scope	Estimated Number of Children yearly affected	Level of sport	Empirical research Studies	Level of awareness in society
Health-related risks of intensive training.	Article 24	Mainly Western world, as well as Eastern Europe and some Asian countries	Several Thousands	High Level	Since 1970's	Medium
Physical Abuse	Article 19	Worldwide	Several Thousands	High level And mass sport	Very scarce still, only since 1990's	Very Low
Psychological Abuse	Article 19	Worldwide	Several Thousands	High level And mass sport	Very scarce still, only since 1990's Increasing	Very Low
Sexual Abuse	Article 19	Worldwide	Several Thousands	High level And mass sport	body of research, only since 1990's	Low to medium

In summary, the focus of child maltreatment in sport has been primarily on issues pertaining to sexual exploitation. Psychological maltreatment is not currently on the radar of those who seek to protect children in sport.

Abuse in Elite Sport

Sport is demanding more and more from its elite performers in the pursuit of excellence. In Donnelly's review paper (1997) he likened these demands to being comparable to 'child labour' for children in elite sport programmes. He also reported that those demands were being placed on elite child athletes (8-16 years of age), and in the constant struggle for success these child athletes were training longer and harder. He further reported that elite child athletes were spending significantly more time with their coaches than recreational sports participants. Earlier, MacAuley in his editorial (1996), advising paediatricians; he made the point that the relationship between the coach and the child athlete could be the most significant relationship that a child has with an adult. He stated that 'To a child the coach or official is a very important figure, and authority. They may pick the team, set the training and have a major influence on their success in the sport. So they may perceive them as a higher authority than their parents' (p. 275). As children work their way up the sporting ranks, the relationship with the coach becomes even more significant as the coach has the power to decide the path of their athletic career. The coach also has a personal investment in the athlete, which may directly relate to his or her own career advancement (Gervis & Brierley, 1999). This view was supported by Kiani (2005) in her unpublished thesis when reporting on elite judokas experiences of their coaches.

In her study she interviewed eight elite junior judoka's, focusing on their perceptions of coaching practices and methods. In response to the issue of personal success for the coach one judoka stated 'I feel like she wants it-like she wants it really badly' (p. 34). Coaches of high-performance athletes Kiani found were dependant on their athletes' success for their own future careers. Ryan's pioneering investigative interviews (1995) had similar findings. Ryan, an award winning journalist, interviewed child/adolescent skaters and gymnasts and explored their relationships with their coaches and concluded that; 'getting an athlete to the Olympics can transform a coaches career, it boosts a coaches business not to mention his or her ego' (p. 185). This would seem to imply that the motives of the coaches are focused on their own status and standing rather than the athletes.

In order to appreciate the role of the coach in the production of world-class performances, there is a need to understand what it takes to achieve excellence in sport. Training is often long, boring and repetitive. Elite sport is physically and psychologically demanding, requiring athletes to push themselves to extreme limits even at a very young age. The sport dominates their lives and often socially isolates them. If an elite child athlete trains six days a week for several hours a day there is very little time left for anything else except school, sleeping, and eating. Athletes also travel abroad to compete and can spend even more time with their coaches than with their parents. This was clearly illustrated by Juba (1986) when he described the lives of elite swimmers; 'these swimmers were able to highlight the hours of tedious, routine work, the anti-social training hours, which isolated them from normal

friendships and the strenuous commitments demanded of today's swimmer'(p. 173)

He went on to ask the question:

Are we looking after our swimmers? Are they pushed beyond endurable limits? And by flogging them up and down an identical stretch of water, day in, day out, week in, week out, are we giving them long-term problems, preventing them from becoming fully-rounded adults? (p. 172).

The coach is therefore in a position of considerable influence, which makes the elite child athlete very vulnerable if it is misused. Burke (2001) reviewed the sociological literature of child athlete-coach relationships from a philosophical point of view and highlighted the power that the coach had over the child athlete. He stated:

Coaches often view their athletes as their possessions. They are wary of outside judgement and questioning of their tactics, philosophies and practices in coaching. They may enact any number of restrictions on their charges, restrictions that are only placed by parents (p. 229).

Within this type of relationship the coaching climate demands loyalty and obedience on the part of the athletes. The methods employed are unquestioned and often pervade all areas of the athlete's life, a privilege that is generally only given to parents' (Burke, 2001, p. 229). Moreover, behaviour on the part of the athlete that conforms often produces a positive bias from coaches, which acts further to reinforce the authoritarian coach-athlete model. Indeed research by D'Arripe-Lomgueville, Fournier and Dubois, 1998 examined the coaching practices of three French Olympic judo coaches using a qualitative methodology interviewing both coaches and six of their highly elite female athletes. They identified six interaction strategies that were adopted by these coaches that delineate this approach. These

were; stimulating rivalry, verbal provocation, displaying indifference, entering into direct conflict, developing team cohesion, and exhibiting favouritism. Although presented by the authors as acceptable or even desirable coaching behaviour, some of the strategies (e.g. stimulating rivalry, verbal provocation by the coaches, displaying indifference, entering into direct conflict with their athletes, and exhibiting favouritism) carry a distinct echo of the concerns that other writers have had about such behaviour being potentially abusive (e.g. verbal abuse, ignoring, isolating; see Garbarino et al's., 1986; Navarre 1989; O'Hagan 1995).

Brackenridge, (1997) has reported cases that showed coaches abusing their position of power which resulted in the sexual abuse of athletes. Through interviews of 11 elite female athletes, who were survivors of sexual abuse by their coaches, she reported a 'widespread fear of challenging a powerful coach' (p. 120). She highlighted that in her sample these athletes demonstrated complicit behaviour, where the dominant culture within the sport was one where the power was firmly in the hands of the coach. Indeed Brackenridge stated that;

The significance of the power of the coach cannot be underestimated and can be likened to that of a priest who is also vested with authority (God) and whose absolute knowledge is not questioned or challenged (p. 120).

This was further illustrated by a survivor who stated 'by then I was absolutely dependent upon him- he was God- without listening to myself from 15-19 he owned me basically' (p.123). This research, whilst focusing on the sexual abuse of elite

athletes, provides strong evidence that supports a 'power over' model of elite coaching.

Whilst Brackenridge was the first to pioneer research into the sexual abuse of athletes, more recently there has been more widespread publicity of sexual abuse of young athletes in the UK, as reported in *The Guardian Sport* (Downes, 2002) and *The Observer Sport* (Mackay, 2001), which highlighted cases against swimming coaches who were found guilty of rape and other sexual abuses of their athletes. More recently *The Daily Mail* (Hull, 2007) reported the case of Claire Lyte an elite tennis coach found guilty of rape and sexual assault of a 13 year old player whom she coached. The evidence reported in court described a relationship of abuse of power and trust; 'She was frightened to speak out because it might have jeopardised her tennis coaching'. But the case is further complicated by the fact that the mother of the player did not inform the police until 10 months after finding her daughter in bed with her coach. It was alleged that this only occurred after she was informed that her daughter's tennis career was not progressing. However, whilst these cases set off alarm bells, there is a paucity of literature that explores the nature of other relationships between elite child athletes and their coaches (Jowett & Cockerill, 2002).

Sexual abuse may not be the only expression of the coaches' abuse of their power. In sport the end, namely winning, often justifies the means. In 1995 Ryan documented through in-depth interviews many instances of coaches from the sports

of gymnastics and figure skating abusing their position of power. She maintained that coaches were committing a legalised form of child abuse, which was hidden behind success. Ultimately, all that was acknowledged in sport were the winning performances, not the methods involved in achieving them.

Crosset, (1989), however, found many unhealthy and overly dependent relationships in elite sports. Through interviews with elite athletes from a range of sports he found that coaches were dominating young athletes resulting in examples of physical, sexual and mental abuse. Crosset gave examples of a coach squeezing a gymnast's buttock and instructing her to lose weight. Another gymnast described the coach 'being almost sick' (p. 104) when she returned to the gym a few kilos heavier after resting due to injury. Two other female subjects spoke about sexual incidents, the first being when the coach insisted on giving her a massage even when she expressed her discomfort. The second described her coach making repeated sexual advances using the threat of her failing at the sport if she reported him. Crosset (1989) also found that all of these relationships were very intense and fraught with issues such as domination, power, control and manipulation, like many domestic abuse situations.

Despite the fact that there is now a greater awareness of the incidence of sexual and physical abuse, sport coaching in the UK is largely unregulated. Although National Governing Bodies of Sport are responding through the introduction of Child Protection documents and courses, people continue to work closely with children

without any, or with only limited formal training. Sport has still not fully addressed the quality assurance of coaches, which leaves child athletes potentially exposed and vulnerable to abuse. Sports still mainly operates outside statutory organisations, and are therefore outside national frameworks, that guide other organisations working with children. David (2005) in his review of children's rights in elite sport, stated 'of all the domains, sport is one of the few that has not been penetrated by human rights' (p. 3). Furthermore, children who participate in sport would not in normal circumstances be considered 'at risk' so researchers and child protection workers have not previously identified them as a vulnerable population. As a consequence if they are subject to abuse, they can fall below the radar, and be mainly ignored.

Further support for describing the coach –athlete relationship as one characterised by an authoritarian hierarchy was offered by Jones, Armour and Potrac (2005) when they described the coach-athlete relationship in top level sport as leading to 'an unquestioning compliant and dependant athlete identity' (p. 378) creating an imbalance of power. Moreover, this type of compliance is perceived to be necessary for success and as result the athlete adheres to it. Research by Jones, Glintmeyer and McKenzie (2005) adopted an interpretive biographical methodology in order to explore the life of an elite female swimmer whose career was terminated by an eating disorder. They highlighted the role of the coach in creating an accepted culture of compliance. Furthermore, they described a culture in which the coaches took charge of the coaching process and their athletes. The accepted behaviour on

the part of the athlete was unquestioning adherence if they were to be successful (Jones et al., 2005).

Ryan (1995) found similar examples when interviewing elite American gymnasts and figure skaters. Throughout her book there are numerous examples of coaches dominating, controlling and humiliating young athletes. Winning was the only thing that was valued. If the athletes could not cope with the regime then the coach would find someone else who could. Training long hours with little food or rest combined with a constant barrage of criticism provoked questions of whether this coaching regime was a form of organised child abuse. Sadly when interviewing the athletes who survived, Ryan identified that the athletes reported there were many residual emotional and psychological problems, which further supported and reinforced the work of a number of authors (Kent et al., 1999; McGee et al., 1997; Mullen et al., 1996) that emotional abuse left long lasting scars. Hence coaches might not always have been the character-building figures that society expected them to be.

Donnelly (1997) interviewed 45 elite athletes from a variety of sports about their experiences in sport. He found that the coach-athlete relationship described by the athletes reflected an over dependence by the athletes where the coach dominated them. A reported example refers to a statement made by a retired figure skater who described her relationship with her male coach as 'destructive' blaming her current emotional problems on the relationship she had had with him. Donnelly (1997) went on to observe the relatively closed world of high performance sport, and found that

athletes spent a lot of time with their coaches and were often greatly influenced by them. However the relationships were not necessarily healthy, as coaches could become obsessed with manipulating and controlling them for their own gains. Donnelly reported that the majority of the problems manifested were in female individual sports with male coaches.

This finding supports the evidence provided by Ryan (1995) and Crosset (1989) who have both documented examples where the coaches' emphasis on performance outcomes created the underlying force behind their controlling behaviour. This has been highlighted by the then 15 year-old World Champion gymnast, Shannon Miller who admitted 'we don't enjoy training. The only pleasure is the results, the medals' (Monnard, 1992, p.36; cited in David 2005).

Lyle (1999) in his book on the coaching process defined the role of an elite coach and the various characteristics as

- A process which is sustained over an extended period of time.
- The objective is to achieve the best possible performance through competition
- The relationship between the coach and performer is an empathetic one, extending beyond the pure physical exercise and training.

These facets of coaching that were highlighted by Lyle appear to have validity, and seem to describe a harmonious relationship. However, that is not always what has been observed.

A case in point is the difficulty for coaches of separating the adult world of sport from the children's world of sport. Consequently, coaches have sometimes suffered heavy criticism for treating children as mini adults (Gould, 1982). Especially in the physical demands that were being placed upon them whereby very young children were involved in intensive training programmes from as early as six years of age (Maffuli, 1998) and often with the focus being on the quantity of training rather than the quality (Bizzini, 1993, cited in David, 2005).

Lee (1986) in his edited book on coaching children tried to counteract these criticisms by examining the moral and social growth which children can experience through sport. He maintained that if coaches treated their role as an educational activity concerning themselves with child development as well as performance, the performer would not be placed under any risk. Therefore, coaching, in Lee's view has a responsibility to understand both child development and psychological needs. Thus in coaching terms maximising a child's performance without damaging a part of them, must be the primary concern. However, as pointed out by Andersonn (2000) in his book which sought to provide guidance for parents of children in elite sport, the social and emotional aspects of children participating in sport are often neglected, with the emphasis being on the physical and motor components.

Research by McPherson (1982) emphasised the importance of the role of the coach as a significant 'other' in the social development process and, stated that coaches can shape an athletes social norms and values. However, Coakley (1992) found that

whilst some coaches took on the responsibility of the role-model or advocate, others abused the power they had. Coakley adopted a qualitative interview methodology with 15 elite athletes from a variety of sports. Through the research on the social dimensions of intensive training it was found that athletes described their coaches as dictators, who employed rigid systems of control, and totally over-powered the relationship. Interestingly, when participating in sport the athletes protected the coaches who behaved in this way as they felt it was normal behaviour and what they deserved. Only on reflection did the athletes find this behaviour abnormal. This notion supports Navarre (1987) who highlighted the problem of abusive behaviour as so endemic to a culture or a community that it was not acknowledged as such. If the above researchers are correct in their conclusions then if the prevailing culture within elite sport is a fundamentally emotionally abusive one, coaches and athletes alike will fail to recognise its destructive nature. This seems to be confirmed by the work of Kiani (2005), who reported one athlete saying; 'maybe it is a form of bullying way of doing things, but it works' (p. 35). This reinforced a 'win at all costs' approach where the means is always justified by the end results achieved. Recent research by Cushion and Jones (2006) provided evidence to support this in an elite academy football environment, in which five coaches and 24 players were studied through a 10 month season. They identified that the authoritarian nature of the football subculture had a pervasive influence on the coaching methods adopted and accepted by coaches. As they stated, 'harsh, authoritarian and often belligerent coaching behaviour was viewed as a necessary aspect of preparing young players' (p. 148). The underlying culture of the academy as described by Cushion and Jones

was one where the coaches maintained the power, and the players were expected to comply. As they stated: 'The coaches were unquestioned and unquestioning gatekeepers to the players aspirations and success within the game' (p. 158). Methods reported to maintain their power and control included abusive language, threats and personal castigation, all of which could fit under the umbrella of emotional abuse as previously described (see Garbarino et al's., 1986; Navarre, 1989). This may have the effect of athletes and coaches accepting abusive behaviour as the norm. Research by Doran (2004) in his unpublished MSc dissertation, investigated perceptions of coach behaviour in football. Through a combination of questionnaires given to 57 'B' licence coaches, and in-depth interviews (n=5). He reported that bullying by coaches was perceived to be the most prevalent form of child abuse in football. Indeed one coach described this behaviour as follows; 'I've seen quite a lot of bullying and heard quite a lot of bullying, which until fairly recently was denied... Calling them awful names in front of their friends. Humiliating them, using foul language to the kids, just debasing them and reducing them to tears' (p. 52). This described behaviour would have fitted the model of emotional abuse previously outlined in chapter two.

However, the culture within elite sport has been such that labelling of this behaviour as 'abusive' has seldom happened. This was observed by Martin (2003) in a study of 140 NCAA student athlete tennis players. Her research found that these NCAA student-athletes did not recognise or acknowledge coach behaviour as being both inappropriate and abusive. However, it must be noted that whilst this study claimed

to investigate both sexual harassment and emotional abuse careful examination of the questionnaire items revealed that the items were exclusively anchored in the realm of sexual harassment, and there was no measure of emotionally abusive behaviour. Thus the implication was loosely made that where sexual abuse exists so too does emotional abuse, but there was no attempt made in this study to measure it directly. Consequently any conclusions drawn from this study regarding emotional abuse must be viewed as unproven.

Three reasons were offered as a means of explanation for the student athletes perceptions; firstly that the power that the coach exerted over the athletes renders them unable to challenge it, secondly, an existence of a type of naiveté that resulted in a lack of awareness of the potential for abuse, and thirdly the actual nature of the coach-athlete relationship. These findings further support the existence of a 'Power Over' culture in elite sport (Evans, 1996) resulting in a 'poisonous pedagogy' (p. 31) which had the effect of controlling the athletes. Interestingly, in the inaugural edition of the *International Journal of Sport Science and Coaching* 2006, a journal that claims to 'bridge the gap between coaching and sport science' a paper was published entitled 'The importance of coaching control' (Fox, 2006) which advocated; 'To be successful, a coach must, above all be able to make players do what he or she wants' (p. 19). This conforms to the commonly held view that in order for coaches to be successful the power needs to remain firmly in their hands. Indeed he went on to say 'within the constraints of morality and rules it doesn't much matter how' (p. 20). A

powerful message which reinforced the current state of play with regards coach-athlete relationships, where dominance was and is, still ruling the day.

Evidence of this was recently captured by Channel 9 in Australia for the entire world to see at the 2007 swimming World Championships. Mikhail Zubkov a well respected coach was filmed assaulting his daughter Kateryna, whom he coaches, because of her poor performance. Commenting on what he saw ex-Olympic swimming champion Kieran Perkins stated:

You know that stuff goes on, but to actually see it is extraordinarily confronting and there's just never a justification for it. As a swimmer, it's not the first time I've seen it, and probably won't be the last. I think that was the scary thing last night. You could just see the fear in her body language that suggests that it might be, probably, not the first time it's happened and if it's left unchecked it wouldn't be the last.

What was acknowledged was that this was common practice behind closed doors in elite swimming; it was just rare for the doors to be opened exposing the vulnerabilities of these athletes for the whole world to see.

These often anecdotal accounts of coaching methods seem to suggest a common culture within elite sport of emotionally abusive behaviour. However, to date there has been no research that has explicitly tried to examine this within the conceptual frameworks provided by researchers from the discipline of child maltreatment.

The minimum competing age

The move towards early identification of talented athletes is one which is well documented, with the majority of National Governing Bodies of sport having some form of talent identification programme in place which runs alongside a developmental competitive programme. As was pointed out by Farstad (2007), 'the situation characterised by early talent identification where children from an early age are faced with serious commitments, a high degree of training, pressure and expectations' is commonplace. Indeed there are numerous examples of children under the age of ten competing and engaged in intensive frequent training programmes (Donnelly, 1997; Hong, 2004; Ryan, 1995).

The IOC does not set any minimum age for competing in the Olympics, but rather leaves it to the discretion of each sport governing body. The confusion that this has caused was exemplified in the recent Beijing Olympics 2008. The youngest competitor was Tom Daly who, at 14 was allowed to compete in diving, where he was competing against athletes over ten years his senior. In the same Olympics there was major controversy because a number of Chinese gymnasts were thought to be competing under age, interestingly though much of the controversy came from the Americans who perceived the Chinese to be gaining an advantage (Barboza, 2008). It raises the question about the inconsistencies in practice and policy in elite sport with respect to child athletes.

The minimum age specifications in some sports to compete at World Championships, Olympics or at the professional level have been revised and the minimum age was raised to 16. Tennis changed its policy on minimum age after the well publicised problems of Tracey Austin and Jennifer Capriati who were competing on the pro-circuit at 14. Gymnastics also raised its minimum age to 16, and cited the protection of the 'mental health' (Swift, 2008) of the gymnasts as being one of the primary reasons for doing so. However, it must be acknowledged that whilst these minimum ages exist there still are Junior World Championships, European World Championships and Junior Olympics in the majority of sports, and the children who compete in them will all be engaged in intensive training programmes as part of their preparation.

In many sports and in many countries residential training centres are the means through which future athletic talent is developed. David Barboza (2008) highlighted this in an interview with Cheng Fei, a Chinese gymnast who explained that she had been sent away from home at the age of seven to train intensively at the National Sports Programme. In such situations it may 'make the child particularly vulnerable to exploitation by competitive coaches' (Farstad, 2007). These practices are common place across the world with children in intensive training programmes training before school, after school and during their weekends (David, 2005). Little time is left over to see family or friends and the separation can itself be traumatic. This was highlighted by Zinedine Zidane when he recalled how at 14 he had to leave home to

join AS Cannes; 'I cannot count the number of nights I spent crying, I missed my family. Football took away my youth' (Terrani, 2000, cited in David, 2005).

Rationale for the present programme of study

This chapter has critically examined the extant and relevant literature in the field from a number of different theoretical perspectives which are anchored in two different contexts; that of child maltreatment and that of sport. Overall, the review demonstrates that policy and research in the area of emotional abuse particularly within the child maltreatment context is still developing and growing having only been acknowledged in the last 20 years. Furthermore, much of this work has focused on emotional abuse within the family. In sport there is a paucity of research that specifically addresses the issues raised, and whilst it must be acknowledged that there is evidence through anecdotal accounts, little if any empirical data exists.

Throughout this chapter it has become apparent that there is a need for a logical advancement in ways of recording data and, thus the current research programme aims to bring together theory drawn from a child maltreatment perspective into a sports context in order to move our understanding forward, and generate sound data from which further investigations and understandings can be drawn. In so doing the findings of the research will provide a unique and original contribution to the body of knowledge in sport.

Chapter Three

Study One: A Qualitative investigation into the phenomena of emotional abuse in elite child sport

Introduction

This study brings together theoretical perspectives that are anchored in child-parent relationships in order to discover if they are applicable to elite coach-athlete relationships. As has been previously shown work on emotional abuse has tended to focus on two distinct aspects; either identification of adult behaviour which can be considered emotionally abusive; or the emotional problems that arise as a consequence of children being emotionally abused by significant adults. It is the aim of this study to coalesce these different theoretical perspectives as a means of examining the process of emotional abuse within sport from the child athlete's perspective.

Primarily there are four key theoretical perspectives that provide the foundation for this study, all of which have been discussed in detail in the previous chapter. These are: Garbarino et al's. (1986) framework of emotionally abusive behaviours,

O'Hagan's (1995) concept of the importance of behavioural frequency in emotional abuse; Bingelli et al. (2001) identification of emotional problem symptoms occurring as a result of childhood emotional abuse, and lastly the concept of a misuse of 'power over' in the culture of coaching existing in elite sport as proposed by Burke (2001). Moreover, all of these theories are used as a means of developing an understanding of the perceptions, cognitions and feelings of the coaching process from the child athlete perspective in order to investigate emotional abuse within the sports context.

However, it is important to be clear as to their relative contributions in the development of the underpinning theory to this study. First it is acknowledged that all of the theories from child maltreatment research are anchored in child-parent relationships. Given that the coach often fulfils the role of a parental figure in the life of elite child athletes (see chapter 2), and it is deemed appropriate to use these as a framework for investigating emotional child abuse within sport. Secondly, in order to understand the sporting context the 'cultural norms' that exist within it must be integrated into the theoretical underpinning of an investigation into emotional abuse. In particular the issue of the power relation, as described by Burke (2001), between the child athlete and their coach needs to be recognized, as this forms the backdrop to many interactions, abusive or otherwise that occur between them.

By using a multi-theoretical approach to investigate the issue it must be recognised that there may be concerns regarding the construct validity of such an approach

given that there is in essence the creation of a ‘new’ construct which draws from elements from the different theoretical perspectives in ways which have never been done before. Trochim (1985) recognised this problem and devised a model in which these concerns could be managed. The Theory of Pattern Matching (Trochim, 1985) describes a method of utilising predicted patterns from the ‘theoretical realm’ and testing them against data patterns from the ‘observational realm’. The key element was to test whether patterns from the two realms match. Trochim maintained that in order for construct validity to have been demonstrated there must be a consistent match between the two patterns. An adaptation of Trochim’s (1985) model was used incorporating the essential features of this study. Based on this approach there are specific details that need specifying in order to be able to consider this conceptual approach in the light of this study.

Trochim proposed that if there is pattern matching between the predicted theoretical concept map and the actual observed data collected which is consistent then construct validity has been achieved. This is an important consideration when utilising separate theoretical perspectives and endeavouring to create a synthesis between all of them in order to develop a new understanding of emotional abuse within a new context, namely sport. Figure 3.1 is an illustration of Trochim’s (1985) model of Pattern Matching for Construct Validity applied to this study.

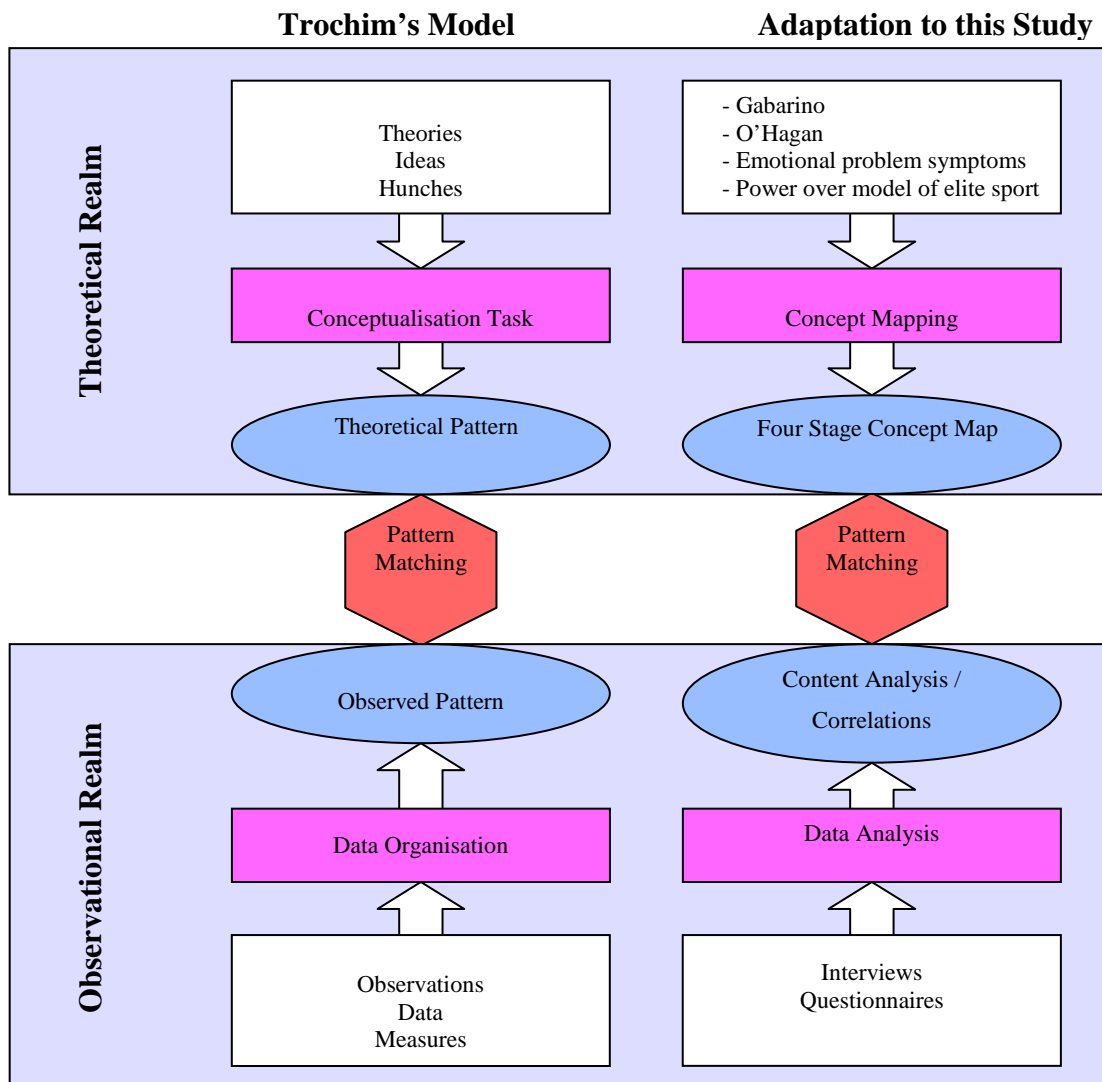


Figure 3.1 An Adaptation of Trochim's (1985) Model of Pattern Matching for Construct Validity Applied to this Study

By taking this approach and applying it to this study the key elements can be considered from the 'theoretical realm':

- Theories: these are specified as: framework of emotionally abusive behaviours-Garbarino et al's. (1986); frequently occurring-O'Hagan (1993);

emotional problem symptoms-Bingelli et al. (2001), and ‘power over’ culture of coaching in elite sport-Burke (2001).

- Ideas: That the parent-child model of relationships is applicable to elite child athlete-coach relationships. Therefore theory from child maltreatment research is applicable within an elite child sport context.
- Hunches: Elite child athletes will have experienced Grabarino et al. behaviour categories and that they will report emotional problem symptoms.

Concept Mapping

Therefore from the above a concept map has been developed which incorporates the key elements which will be tested in this study. This is a four stage concept map, which hypothesises that elite child athletes will:

Stage One: Have experienced Garbarino et al’s. (1986) behaviour categories from their coach

Stage Two: Have experienced this behaviour frequently (O’Hagan, 1993)

Stage Three: Report some ‘emotional problem symptoms’ (Bingelli et al., 2001)

Stage Four: Report a misuse of ‘power over’ model in elite coaching (Burke, 2001)

This concept map is anchored in the ‘theoretical realm’ of the model, and the study is designed specifically to generate data from the ‘observational realm’ and see if it matches the patterns predicted by the ‘theoretical realm’ in the concept map.

Aims of the Study

The overall aim of the study was to test the concept map through preliminary retrospective investigations into the experiences of elite child athletes in the coaching context. Specifically the objectives were:

- To investigate the athlete perceptions of their coaches behaviour utilising Garbarino et al's. (1986) framework of behaviours.
- To identify if the eight behaviours that Garbarino et al's. described as 'emotionally abusive' were reported by athletes as having been experienced by them as elite child athletes.
- To identify perceived frequency patterns of coach behaviour within Garbarino et al's. framework in accordance with O'Hagan.
- To identify if, where athletes report having experienced coach behaviour as identified within Garbarino et al's. framework, they also report emotional problem symptoms.
- To identify if elite athletes perceived a misuse of 'power-over' culture of coaching.
- To identify if elite athletes report a change in their coaches behaviour once they had been identified as elite.

Methods

Consideration of Validity and Reliability

The consideration of all aspects of validity must be taken carefully into account in the development of any measures to ensure that any claims made from resulting data can be considered valid and reliable. Whilst it is acknowledged that a number of the elements of validity might be considered more pertinent to quantitative methodology, each has been considered with respect to the design of this study and is discussed with particular reference to this study.

Validity

Construct validity is the overarching concept that asks the question; are you measuring what you think you are? Construct validity must be at the heart of any measure and provides the solid foundation from which all judgements are made. 'We can only claim that our measures have construct validity when we understand how our constructs work in theory and that our measures produce evidence of this in practice' (Trochim, 2006, p. 23). In order to do this there are some key processes of measurement that must be undertaken. However, within this current study there are some limitations to these assessments which need to be fully considered and understood in order to be sure that the measures used have rigour.

Translation Validity

This is the degree to which there has been an accurate translation of the construct into the measure, in this instance the interview. There are two aspects that need consideration.

- Face Validity; this is a means of assessing whether the questions being asked appear to be a good translation of the construct based on the theory. Often external ‘experts’ to a study are used to assess this particular validity to get an assessment of whether in their ‘opinion’ the questions reflect the construct. In this study this was not possible because there currently are no recognised experts to call on. In addition it should be acknowledged that the athletes in the study are the experts on their own experiences, and that a person’s own views, thoughts and experiences are so subjective and individual that no outside ‘expert’ should be considered more expert in judging whether they are ‘correct’ or not. In this sense a person is the ultimate expert on the validity of their own experiences and, as such, data collected from them should be viewed as expert opinion. However, this expert data does undergo a transformation through the qualitative analysis process. Thus in essence the data becomes second order.
- Content validity; this is a means of assessing whether the content of the measures (interview/questionnaire) has all the appropriate elements to reflect the construct. The content validity for this study is derived from four theoretical perspectives: firstly, Garbarino et al’s. (1986) theory which

relates to emotional abuse being defined by specific adult behaviour categories (belittling, humiliating, rejecting, shouting, threatening, blaming, isolating and ignoring). Secondly, that behaviour must be experienced frequently to constitute emotional abuse (O'Hagan, 1995). Thirdly, theory that predicts emotional problem symptoms (low self-esteem, depression, low self-worth, emotional withdrawal and anger) occurs as a result of a child experiencing the above behaviours from a significant adult. (Bingelli, Hart & Brassard, 2001). Lastly, that this will occur in a 'power-over' culture of coaching (Burke, 2001).

Criteria-Related Validity

This element of validity testing considers if the measures produce data that would be predicted by the constructs of the theories. There are four aspects that need consideration.

- Predictive Validity; this is a means of assessing whether the measure is able 'to predict something that it should theoretically be able to' (Trochim, 2007). Often this is assessed by utilising other measures with known validity to see if there is a high correlation between the two. However, this is not possible with this study as there are no other appropriate measures with which one could correlate it. But the basis of utilising the theory to predict the data outcomes still holds true. In this study the theories would predict that if a child athlete had experienced any of Garbarino et al's. behaviour categories there would be a reported emotional problem symptom response. The theory

would further predict that there would be a high correlation between these two outcomes.

- **Concurrent Validity**; this is a means of assessing if the measure has the ability to distinguish between groups that it should be able to. In this study if an athlete reports never having experienced any of Garbarino et al's. behaviour categories of emotional abuse there should be no reported emotional problem symptoms.
- **Convergent Validity**; this is a means of assessing if the measure has the ability to produce similar data patterns that converge with others. In this study as there currently exists no other data sets within sport one would have to utilise data from other studies (e.g. parent-child relationships) as a means of describing it.
- **Discriminant Validity**; this is the means of assessing if the measure has the ability to produce data patterns to which it is not similar. The measures should be able to distinguish between those athletes who do report experiences congruent with emotional abuse and those that do not.

Reliability

Reliability relates to the consistency and repeatability of any measure. In consideration of reliability within the context of a qualitative study one must take into account if there is an internal consistency to the responses given to the interview questions. These must also be consistent with the predicted concept map. Consequently the interview design should be constructed in such a manner as to

ensure that responses given can be considered reliable. Therefore to strengthen reliability within an interview, the design of the interview questions needs to ensure that the responses given to each question can confirm the previous one. There is also a deepening level of questioning as the interview proceeds which aids confirmation of previous responses. Thus, as the respondents answer each set of questions there is an increased reliability that their answers are truthful if they have given consistent responses to all questions.

These methodological issues have been considered in the design of this study.

Participants

National Governing Bodies of Sport (NGB's) in the UK only select small numbers of child athletes to be part of their World Class Performance Programme. This study aimed to identify a sample from this small population, using purposive chain sampling methods (Patton, 1990). Athletes were selected on the basis of the following criteria:

1. They had been in World Class Performance programmes or equivalent.
2. They were resident in the Greater London area.
3. They had been identified as 'elite' while still a child (i.e. under 18).

Consequently, 12 former international child athletes (Male = 4, Female = 8) from the sports of football (n = 3), gymnastics (n = 4), athletics, netball, diving, and hockey (n = 1 each) were recruited as participants for the study. All the athletes had been identified as elite as children (i.e. between 8-18 years of age), and had competed at

the highest level for a period of 8 years on average (Age at identification: $M = 13.1$ yr. $SD = 2.4$ yr.) Age at time of interview (Age: $M = 22.9$ yr., $SD = 0.9$ yr.) Thus, participants were reflecting on their past experiences as international child athletes, and so their responses represented the residual impact of their experiences that had survived. Men coached 4 of the 8 female athletes and 3 of the 4 male athletes. Women, similarly, coached 4 of the 8 female ($n = 4$) child athletes, but only 1 of the male ($n = 1$) child athletes.

Measures

This initial exploratory study used semi-structured interviews which were grounded in the four elements of the concept map. Interviews were extensive and retained an open-ended element for detailed investigation. It was critical that trust was built between the participants and the researcher, given the sensitive nature of the area of investigation.

The interviews were constructed with the express purpose of testing the conceptual map as previously outlined. First, questions were asked about the sporting life history of the athlete. General questions relating to demographic information of each athlete was gathered which included: identification of sporting career to date, including sport, length of time competing, highest level of achievement, and at what age they were identified as an elite athlete, who they were then coached by when they were competing at their highest level, but under the age of 18.

The second series of questions was designed to test the model for both validity and reliability. The interview was designed to probe the participants for information that would either support or refute the concept map proposed by the theories. Thus questions were asked in a specific order, each one probing more deeply than the previous one, and to guard against the possibility that the participants' responses could be false positives, and hence unreliable. Thus it was only if participants were able to give responses at all levels of questioning that one could consider accepting their responses as being a good reflection of their experiences, and thus accept the proposed concept map as being a valid construct.

The same sets of questions were asked for each of the key behaviours that Garbarino et al's. had identified as 'emotionally abusive'. Furthermore, the follow-up questions were designed specifically to gather data that would relate to each element of the concept map, and thus provide evidence that could inform the pattern matching process between the 'theoretical' and 'observable' realm (Trochim, 1985). Thus the interview guide was constructed in the following way.

Interview Guide:

Level 1: Were you ever belittled in your training sessions?

Level 2: If yes: What was the frequency of such behaviour?

Level 3: Could you give me some examples of such behaviour?

Level 4: How did this behaviour make you feel?

The same sequence of questions was then repeated with the following words: humiliated, shouted at, rejected, threatened, scapegoated, isolated and ignored replacing 'belittled'.

The final question was: Did the behaviour of your coach change once you had been identified as elite?

The interview was constructed to ensure reliability of responses, each level of questioning was designed to elicit a response that confirmed the previous one, therefore enhancing the probability of accurate responses, and reliable data. Whilst the methods employed here were qualitative, in essence the aim was ensure that particular quantitative information could be obtained through the interview process in order to confirm or refute the concept map.

Procedure

Purposive chain sampling (Patton, 1990) methods were employed in the recruitment of participants for the study. Where the researcher knew the interviewee they were contacted directly by the researcher. The 'purposive chain sampling' was initiated with three of the athletes whereby they knew of other athletes who met the criteria who they thought would be willing to participate in the interviews. In these instances the original contact was made by the athlete, once agreement had been sought from the next athlete the researcher contacted them via telephone.

Each interview lasted on average 30 minutes and took place at the discretion of the athlete and was conducted at a time and place to suit the participants. All interviews were recorded and transcribed verbatim (see Appendix C).

All interviewees signed an informed-consent form and were conversant with the nature of the study; that they could withdraw at anytime during the interview and that their names would remain confidential, in accordance with Brunel University ethics guidelines. In order to protect anonymity each athlete was given a number from 1-12.

Data Analysis

At the end of the data collection process, the researcher transcribed each interview verbatim. An inductive and deductive approach was employed to analyse the data. The inductive method helps to organize large amount of data, including typed interview transcripts, into meaningful themes and categories (Patton, 1990). The deductive method helps to congregate information from the general to the more specific level (Thomas et al., 2001).

The researcher primarily employed the deductive approach to analysing the data because this method was already imposed in this study when the interview guide was designed. The analysis sought to confirm or refute whether the concept map, previously described, was borne out in the reported experiences of the participants. Thus, analysis of the data occurred at each level of questioning and was concerned

with identifying the predicted pattern matching between the theoretical (concept mapping) and the observable (interview data). Firstly, had the specific behaviour been experienced by the athlete? If yes then what was the frequency of it? Thirdly, the analysis sought to identify examples of the coach behaviour as a means of contextualising it within a sports environment and providing further evidence for the reliability of the data. Fourthly, the analysis sought to identify any reported emotional responses that were associated with the behaviour and examine any residual feelings. The final analysis focused on the athlete responses to whether or not the behaviour of the coach changed once they were identified as elite. This analysis sought to confirm or refute the notion that the world of elite child coaching is different from participation level sport, and that the predicted 'power over' model of coaching was prevalent in the athletes reported experiences.

This approach was adopted in order to meet the research aims of the study previously outlined.

Results

Belittling

Table 3.1 is a summary of all the responses to questions relating to the behaviour category of 'belittling'. All of the athletes reported having experienced belittling behaviour by their coaches. The majority of athletes reported that this behaviour was used frequently by their coaches. This suggests that this behaviour was firmly embedded in the coaching methods employed by their coaches. The examples of behaviour described by the athletes highlight incidences where the comments made by the coach were focused on the individual characteristics, not on their performance. The athletes reported a range of responses to the question '*How did it make you feel?*' They stated that they felt a lack of self-worth, diminished self-esteem, and depression. What emerged was that all the athletes expressed a very fragile sense of self worth that seemed to extend far beyond the sport environment.

Humiliating

Table 3.2 is a summary of all questions relating to the behaviour category of 'humiliating'. Nine of the twelve athletes reported having been humiliated by their coaches. All of these athletes stated that they had frequently experienced this from their coach. The types of behaviour described by the athletes identified: put downs in front of team-mates, finding fault, and making the athlete feel small. The athletes again reported a range of feelings in response to the behaviour of their coach. These included poor sense of self worth, diminished self confidence, and fear.

Table 3.1 *Summary of Athlete Interviews: Exploring the Abuse Category of 'Belittling'*

Interview Questions	Raw Data
Belittling	
Were you ever belittled in your training sessions?	12 athletes responded 'yes'
What was the frequency of such behaviour?	'Frequently, definitely' (A1) 'Occasionally within the session' (A3) 'It was frequently within the session' (A4, A11, A12) 'It was quite frequent, it certainly wasn't rare' (A6)
Examples of belittling behaviour:	'He would call me fat' (A5) 'He told me I was stupid' (A4) 'He would tell everyone that I was fat' (A2)
How did it make you feel?	<p data-bbox="837 805 1220 860">Lack of self confidence / Self esteem</p> <p data-bbox="1247 805 1913 1016">'Embarrassed, like I was useless at the sport' 'Just a total loss of self esteem' (A9) 'I even found myself losing confidence in myself as a person' (A10) 'Inadequate, useless, just a total loss of self esteem I suppose it affected me outside football as well because I thought I was useless at everything' (A9)</p> <p data-bbox="837 1049 1041 1075">Lack of self worth</p> <p data-bbox="1247 1049 1608 1104">'I felt worthless as a person' (A2) 'I felt useless generally' (A12)</p> <p data-bbox="837 1141 1115 1167">Self reported Depression</p> <p data-bbox="1247 1141 1913 1261">'Pretty useless, when you get stupid all the time it doesn't do a lot for your confidence. I mean it made me feel down and depressed' (A11) 'Depressed and really low' (A7)</p> <p data-bbox="837 1294 1083 1320">Emotional withdrawal</p> <p data-bbox="1247 1294 1913 1349">'I went into my shell because I absolutely hated that when it happened' (A1)</p>

Table 3.2 *Summary of Athletes Interviews: Exploring the Abuse Category of 'Humiliating'*

Interview Questions	Raw Data
<p>Humiliating Were you ever humiliated in your training sessions?</p>	9 athletes responded 'yes'
What was the frequency of such behaviour?	<p>'It happened all the time' (A4) 'Occasionally within the session' (A3) 'It was very regular' (A6)</p>
Examples of humiliating behaviour:	<p>'He put me down' (A3) 'He said he was ashamed of me' (A12) 'Upset and embarrassed in front of other people' (A4) 'She does it to make me feel small and so that I know that she is in charge' (A10) 'She would go absolutely ballistic at me and tell me that I was too fat for the sport, so that was very humiliating in front of my team mates' (A7) 'I think being humiliated is so horrible and the pain of it I think I will always remember' (A2)</p>
How did it make you feel?	<p>Lack of self confidence / Self esteem 'I lost a lot of self confidence' (A7) 'Just a total loss of self esteem' (A9) 'I even found myself losing confidence in myself as a person' (A10)</p> <p>Lack of self worth 'I was meant to be one of the best but I never felt like this, I always felt like I was rubbish and worthless generally' (A4) 'I felt useless generally' (A12) 'Not worth anything as a person or a player' (A11) 'All it did was destroy me as a person to make me feel worthless' (A12)</p> <p>Self reported Depression 'I just thought what was the point? Because I felt so depressed' (A8) 'Just felt so low in myself' (A6)</p> <p>Fear 'I was scared to do anything because of this' (A11)</p>

Table 3.3 *Summary of Athletes Interviews: Exploring the Abuse Category of 'Shouting'*

Interview Questions	Raw Data
Shouting	
Were you ever shouted at in your training sessions?	12 athletes responded 'yes'
What was the frequency of such behaviour?	<p>'Frequently, both in training and match situation' (A12)</p> <p>'Oh this happened all the time' (A11)</p> <p>'That was every training session' (A6)</p>
Examples of shouting behaviour:	<p>'He was always very aggressive, it scared me a lot. I was frightened to do anything because everything I did was wrong, or everything I did he shouted at' (A2)</p> <p>'Everything he said he had to shout' (A3)</p> <p>'He would shout nasty comments all the time' (A4)</p> <p>'When she shouts it is very personal, I don't like it and I can't train properly, it puts me off my dives because she scares me when this happens' (A10)</p>
How did it make you feel?	<p>Lack of self confidence / Self esteem 'I just had no confidence in myself' (A2)</p> <p>'It really knocked my confidence I felt almost embarrassed to play football' (A1)</p> <p>Lack of self worth 'Like I was useless' (A1)</p> <p>Self reported Depression 'Depressed, unconfident like there was no point in my being there' (A11)</p> <p>'When I got worse she shouts even more, which makes me even more depressed' (A10)</p> <p>'At times I would go home feeling so depressed' (A2)</p> <p>Emotional withdrawal 'Anxious because I was scared of going to training' (A7)</p> <p>'At first I was very scared; it made me go within myself' (A5)</p> <p>'When I'd had enough I would imagine a wall around me and I could hide behind that, it made me really withdrawn' (A4)</p>

Shouting (verbal assaults)

Table 3.3 is a summary of all questions relating to the behaviour category of 'shouting'. All the athletes reported that they had been shouted at by their coaches. Athletes reported that this was a very common behaviour displayed by their coaches, Examples of this type of behaviour included name calling, verbal attacks and shouting nasty comments. The resultant emotional response to this behaviour was described by the athletes as making them feel useless, anxious, withdrawn and scared.

Scapegoating (blaming)

Table 3.4 summarises all of the questions relating to the behaviour category of 'scapegoating'. Seven athletes responded that they had experienced this type of behaviour from their coach. For these athletes the pattern of this behaviour was reported as occurring frequently. Examples described by the athletes of this type of behaviour included; blaming one athlete for team failures, and finding fault.

Table 3.4 *Summary of Athlete Interviews: Exploring the Abuse Category of 'Scapegoating'*

Interview Questions	Raw Data
Scapegoating	
Were you ever scapegoated in your training sessions?	7 athletes responded 'yes'
What was the frequency of such behaviour?	<p>'Frequently' (A4)</p> <p>'It was frequent, every training session' (A8)</p> <p>'This happened quite frequently' (A6)</p>
Examples of scapegoating behaviour:	<p>'If someone couldn't do a move he would get the whole squad to do extra conditioning' (A8)</p> <p>'He loved telling you that it was your fault, and then you felt you had let everyone down' (A10)</p> <p>'Particularly because I played defence and when goals went in he shouted at me from the side telling me it was my entire fault' (A12)</p>
How did it make you feel?	<p data-bbox="842 826 1199 849">Lack of self confidence / Self esteem</p> <p data-bbox="1247 826 1906 932">'It's hard to get your confidence back up especially when there is always someone reminding you how badly you did' (A7)</p> <p data-bbox="1247 881 1598 904">'Just a total loss of self esteem' (A9)</p> <p data-bbox="1247 909 1906 932">'I even found myself losing confidence in myself as a person' (A10)</p> <p data-bbox="842 963 1020 985">Lack of self worth</p> <p data-bbox="1247 963 1906 1042">'I just felt so little, in a sense I felt stupid and that I shouldn't be there and I didn't deserve to be in the training session because I wasn't worth anything' (A6)</p> <p data-bbox="1247 1047 1541 1070">'I felt useless generally' (A12)</p> <p data-bbox="1247 1075 1734 1097">'Not worth anything as a person or a player' (A11)</p> <p data-bbox="1247 1102 1906 1153">'All it did was destroy me as a person to make me feel worthless' (A12)</p> <p data-bbox="842 1183 1083 1206">Self reported Depression</p> <p data-bbox="1247 1183 1688 1206">'I hated it; it made me feel so depressed' (A8)</p> <p data-bbox="1247 1211 1906 1261">'which ended up in me feeling very low and generally useless in everything I tried' (A12)</p>

Table 3.5 *Summary of Athlete Interviews: Exploring the Abuse Category of 'Rejecting'*

Interview Questions	Raw Data
Rejecting	
Were you ever rejected in your training sessions?	6 athletes responded 'yes'
What was the frequency of such behaviour?	'This was frequent' (A10) 'Oh this happened all the time' (A11) 'That was every training session' (A6)
Examples of rejecting behaviour:	'It is very hostile in both body language and emotion, it's like she doesn't want to know me if I do something badly' (A11) 'If you are at the same level for a few weeks you are rejected if you're not learning quickly enough' (A8) 'Hostile because she would walk away and leave me standing there not knowing quite what to do' (A7)
How did it make you feel?	<p data-bbox="842 797 1220 854">Lack of self confidence / Self esteem</p> <p data-bbox="1247 797 1908 919">'It was very hostile because he would turn his back on me like I almost didn't exist' (A8) 'It really knocked my confidence I felt almost embarrassed to play football' (A1)</p> <p data-bbox="842 951 1041 976">Lack of self worth</p> <p data-bbox="1247 951 1908 1008">'Obviously useless at my sport and useless as a person' (A10) 'Useless and that you are worth nothing' (A8)</p> <p data-bbox="842 1040 1108 1065">Self reported Depression</p> <p data-bbox="1247 1040 1908 1195">'I feel really depressed when this happens and like I shouldn't bother training at all' (A10) 'When I got worse she shouts even more, which makes me even more depressed' (A10) 'At times I would go home feeling so depressed' (A2)</p> <p data-bbox="842 1227 1083 1252">Emotional withdrawal</p> <p data-bbox="1247 1227 1908 1373">'Anxious because I was scared of going to training' (A7) 'At first I was very scared; it made me go within myself' (A5) 'When I'd had enough I would imagine a wall around me and I could hide behind that, it made me really withdrawn' (A4)</p>

Rejecting

Table 3.5 is a summary of the athlete responses to questions relating to the behaviour category of 'rejecting'. Eight of the athletes responded in the affirmative to this question, interestingly the majority of these athletes were from individual sports. The athletes who had experienced this behaviour reported that this often occurred after they had made a mistake. The resultant feelings expressed by the athletes indicated that felt diminished self-worth, heightened sense of depression, and increased levels of fear which resulted in emotional withdrawal.

Isolating

Table 3.6 is a summary table of athlete responses to questions about the behaviour category of 'isolating'. Four athletes responded that they had experienced this type of behaviour from their coach. However, they reported that they experienced this behaviour less frequently than some of the other previously described behaviours. Examples of this behaviour included making the athlete train on their own, and removing the athlete from the training environment. Where the athletes reported this type of behaviour the resultant emotional response was one of loneliness, reduced sense of self-worth and depression. The athletes reported an acknowledgment of the coaches' power over them, and described how they were expected to conform to the demands of the coach if they wanted to succeed.

Threatening

Table 3.7 is a summary of athlete responses to questions relating to the behaviour category of 'threatening'. Nine of the athletes responded that they had experienced this behaviour from their coach. The reported frequency ranged from all the time to occasionally. Examples of this type of behaviour included threats in relation to the athlete's future and removing the athlete from competitions. The behaviour described illustrates the power that the coach exerted over the athlete in determining their future. Where the athletes were engaged in a professional sport the athletes reported that the coach could determine their career potential. The athletes reported experiencing a range of emotions which included; anger, depression, and diminished self-worth.

Ignoring

Table 3.8 is a summary of athlete responses to the behaviour category of 'ignoring'. Six of the athletes reported that they had experienced this type of behaviour from their coach. The frequency of this behaviour was described as being occasional to frequent. One athlete reported that they would have liked their coach to behave in this manner as it would have given him 'a break'. Examples of this behaviour cited by the athletes included lack of acknowledgement of the presence of the athlete, not coaching the athlete and ignoring the athlete when mistakes had been made. The athletes reported that they felt stupid, worthless and depressed.

Table 3.6 *Summary of Athlete Interviews: Exploring the Abuse Category of 'Isolating'*

Interview Questions	Raw Data
Isolating	
Were you ever isolated in your training sessions?	4 athletes responded 'yes'
What was the frequency of such behaviour?	'Occasionally' (A10; A2) 'No' (A8; A11; A12; A4; A3) 'This was frequent' (A5)
Examples of isolating behaviour:	'She did send me out of the gym' (A6) 'What he would do was to make you do conditioning alone to punish for what you did wrong' (A5) 'I would have to skip in the corner while the other girls were training' (A2)
How did it make you feel?	<p data-bbox="842 946 1041 971">Lack of self worth</p> <p data-bbox="1247 946 1913 1092">'It made me feel very lonely and like I was a bad person' (A6) 'Very upset, completely humiliated and fat, he caused me a lot of pain, mentally. I hated being isolated because you feel so alone' (A2)</p>
	<p data-bbox="842 1133 1108 1157">Self reported Depression</p> <p data-bbox="1247 1133 1913 1214">'Depressed because I think she does it to show me that I can't do it without her and she is more important than me, so I have to conform to her to get trained' (A10)</p>

Table 3.7 Summary of Athlete Interviews: Exploring the Abuse Category of 'Threatening'

Interview Questions	Raw Data
Threatening	
Were you ever threatened in your training sessions?	9 athletes responded 'yes'
What was the frequency of such behaviour?	'It was occasional' (A1) 'Frequently' (A2) 'Yes this happened all the time' (A4)
Examples of threatening behaviour:	'He did it to show me he could take away my chance of success' (A2) 'He threatened not to put me in certain trials, on not let me play certain games' (A3) 'He threatened that my career would be over if I did not compete [when injured]' (A4)
How did it make you feel?	<div data-bbox="842 899 915 927">Anger</div> <div data-bbox="1247 899 1913 992"> 'It made me angry because I felt like he had done it on purpose' (A4) 'Angry at first' (A11) </div> <div data-bbox="842 1024 1041 1052">Lack of self worth</div> <div data-bbox="1247 1024 1730 1084"> 'Like I was useless and worth nothing' (A5) 'So she does it to make me feel small' (A10) </div> <div data-bbox="842 1117 1108 1144">Self reported Depression</div> <div data-bbox="1247 1117 1913 1235"> 'Depressed like I should give up, it upset me as well I think I was always crying when this happened' (A2) 'Depressed because he did it all the time' (A11) 'Anxious, and it made you really depressed' (A12) </div>

Table 3 8 *Summary of Athlete Interviews: Exploring the Abuse Category of 'Ignoring'*

Interview Questions	Raw Data
Ignoring	
Were you ever ignored in your training sessions?	6 athletes responded 'yes'
What was the frequency of such behaviour?	'Frequently' (A4) 'Occasionally within training sessions' (A12) 'No not really, I wish he did ignore me at times then it would have given me a break' (A11)
Examples of ignoring behaviour:	'When I was injured he just ignored me, when I did something wrong he would also ignore me' (A4) 'If you weren't his favourite at that time then he would just leave you to get on with things' (A5) 'If my performance wasn't any good she would just say nothing' (A6)
How did it make you feel?	Lack of self worth 'I felt stupid when I was being ignored and worthless' (A12) 'I feel like she doesn't care about me' (A10) 'Useless' (A8) 'I just felt worthless in myself' (A5) 'Like I was worthless and not a person' (A4)
	Self reported Depression 'Gutted, depressed, upset' (A1)

Table 3.9 Summary of Athlete Responses in Relation to the Power Relationships that Existed between Athlete and Coach

Raw Data	Athlete
All 12 athletes reported that the coach had misused their power	
'He made me very fearful'	A1
'He did it to show me he could take away my chance of success'	A2
'I just accepted it, because he was my coach and you had to follow his rules.... like I was his property... he had to keep asserting his authority over me'	A3
'Just to assert his position of authority over you... there was nothing you could do about it'	A4
'He seemed to enjoy playing with your mind'	A5
'Because you take the sport so seriously it is you life almost, and the coach can take it all away	A8
'He became a power maniac because I was good he thought it was all his doing'	A9
'I think she does it to show me that I cannot do it without her, and she is more important than me'	A10
'Depressed because you were putting your best and he could take it all away	A12

Table 3.10 *Summary of Athlete Responses to the Question: Did your Coach's Behaviour Change Once You Were Identified as Elite?*

Raw Data	Athlete
12 Athletes responded in the affirmative	
'He became very intense and wanted you to achieve his own goals rather than your own'	A1
'He became very intense and driven; it was happening overnight, it was like it was his sport now and his career not mine'	A4
'Yes it became a lot more intense, she did shout at me before but it became a lot more aggressive, her behaviour became very negative'	A6
'Yes it did a lot actually she put me under so much pressure'	A7
'Yes it was more pressurised, and less compliments what I mean by this is he was more pushy'	A8
'He became more power maniac because I was good he thought it was his own doing'	A9
'Yes because I was expected to produce a lot more in training and he became very serious with me'	A11

Power relationship

Table 3.9 details responses from the athletes that illustrate the nature of the power relationship that existed between the child athletes and their coach. In all instances the responses indicate that the power was firmly placed in the hands of the coach, and that the athletes did not have any power in the relationship. Furthermore, athletes reported that their coaches reinforced their position of ‘power over’ them.

Change in behaviour

Finally, Table 3.10 is a summary of all the athletes’ responses to the question: *Did your coach’s behaviour change once you had been identified as elite?* All the athletes reported that the change was negative with a more ‘serious’ attitude now taken towards training. The responses indicate that there was a different coaching climate experienced by these athletes once they were identified as elite child athletes.

Summary of results

- All athletes (n=12), reported experiencing some of the behaviours described by Garbarino et al’s. from their coaches when they were child athletes
- All eight of the behaviours described by Garbarino et al’s. were reported by some of the athletes in the study. ‘Isolating’ (n=4) ‘rejecting’ (n=6) and ‘ignoring’ (n=6) were the least often reported; ‘shouting’ (n=12), ‘belittling’ (n=12) were most recurrently reported.

- No athlete reported experiencing all of the behaviours described by Garbarino et al's.
- Patterns of frequency varied with respect of the different behaviours. 'Shouting' was reported as having been experienced most often.
- When athletes described experiencing a behaviour identified within Garbarino et al's. framework they also described symptoms associated with emotional problem symptoms. These included: feeling depressed, low self worth, low self confidence and emotional withdrawal.
- All athletes (n=12) reported a negative change in their coaches behaviour once they had become elite
- All athletes (n=12), reported their coaches misusing their power over them.
- On average, athletes reported a ten-year residual effect.

Discussion

The primary aim of the study was to utilise the four key theories outlined in the concept map to investigate retrospective child athlete perceptions in relation to their experiences in an elite sport context. Thus the interview guide was framed specifically around the concept map and first; using the Garbarino et al's. framework of emotionally abusive behaviours provided the anchor for the theoretical basis for the investigation.; the secondary aim of this study was to identify if within an elite sports context these behaviours were retrospectively perceived to have been experienced by elite child athletes, and what the frequency of their experiences were.

Thirdly, the study aimed to assess if these athletes had experienced coach behaviour congruent with Garbarino et al's.'s framework and if so did they report any emotional problem symptoms. Lastly the study aimed to test the existence of a 'power over' model of coaching. Therefore, the study was designed to test the proposed concept map which was an integration of four key theoretical concepts from different realms into the context of elite child coaching.

The data revealed that all of the athletes reported that they had experienced some of these behaviours from their coach whilst they were training as an elite child athlete. Specifically; belittling and shouting were reported by all athletes as being most frequently experienced as part of their coaches' day-to-day coaching methodologies. It would appear that this was a frequent 'coaching tool' used by the coaches of these athletes when they were elite child athletes. Isolating, Ignoring and Rejecting were less frequently experienced, but were nevertheless used by their coaches. Athletes reported the occurrence of these behaviours independent of the gender of their coach, and the sport participated in whether team or individual. These findings provide strong support for Garbarino et al's.'s framework of emotionally abusive behaviours being in evidence as part of elite coaches training practices. Furthermore, the findings would also support the application of theory that describes behaviour in a child-parent relationship as having currency in helping to understand the nature of the coach-child athlete relationship. The examples of the coaches' behaviour that the athletes reported provide an insight into real life experiences of each behaviour

category which are anchored in the sports context. This is important as it is only through identifying these experiences that it is possible to access their emotional responses to their coaches' behaviour. Currently in the literature this only exists within the framework of parent-child relationships.

The third aim of the study was to explore the patterns of behaviour within Grabarino et al.'s framework with respect to the perceived emotional problem symptoms and impact on the athletes. It was important to identify if there was congruence between the athletes' responses and previously identified research which has sought to explain the consequences of experiencing such behaviour as described by Garbarino et al's. in terms of the emotional landscape that can be produced.

The resultant feelings that the athletes reported included: feeling stupid; feeling worthless; feeling upset; lacking self-confidence; feeling angry; feeling depressed; feeling humiliated; feeling fearful and feeling hurt. These feelings that they reported having experienced are consistent with descriptions of children who have been emotionally abused. (Bingelli et al. 2001; Gracia, 1995; Kent & Waller, 1998; McGee et al., 1997; Mullen et al., 1996; O'Hagan 1995). What appeared to emerge was that all the athletes expressed a very fragile sense of self worth that extended beyond the sport environment.

These findings raised a number of important issues which previously have not been considered. Primarily, these athlete responses reflected a negative emotional

landscape which needs to be better understood. If one considers Garbarino et al.'s.'s perspective; that 'In almost all cases it is the psychological consequences of an act that define it as abusive' (p. 7), careful consideration should be taken when evaluating these findings within the context of emotional abuse. Indeed, if one considers the data describing the frequency patterns of behaviour reported by the athletes, the athletes experienced it on a regular basis. This was particularly the case for 'belittling', 'humiliating' and 'shouting'. This evidence should be considered in the light of O'Hagan's (1993) definition which maintains that in order to define an act as emotionally abusive it must be 'sustained and repetitive' (p.28). Where this was the case emotional compliance has been observed in children in response to the behaviour of the significant adult (O'Hagan, 1995). There might be parallels that can be drawn here between an elite coach and a parent. As pointed out by Coakley (1992), elite athletes often regard their coaches as the 'significant other' whereby the coach is the most influential person in their life. Consequently, if this was not the case the reported impact of their coaches' behaviour would not have been described as being so far reaching and damaging. However, there was a strong degree of acceptance of this as being part of their elite athlete experience, and one which has to be endured in order to be successful. This supports Jones et al. (2005) who identified that the culture of compliance so prevalent in elite sport heightens athlete vulnerabilities and lessens self worth. Furthermore, it also may provide evidence to support Navarre's (1987) assertion that the prevailing culture can mask emotionally abusive behaviour because it becomes normalised. Many of these athletes were competing nationally and internationally when they were experiencing these

feelings. Moreover, the experience of their coach's behaviour was long lasting leaving emotional scars. As their suffering was not acknowledged, there was no support to help them heal.

When an athlete is identified as having potential or as elite the athletes reported that the dynamics of the relationship changed, as did the expectations of the coach. The assumption here is that athletes will be compliant with any methods that the coach chooses to adopt to get them success. These findings (see Table 3.9) provide some insight into the power relationship between the elite athlete and their coach. The coach was in a position of power whereby they had the ability to 'confer advancement or failure' (Home Office, 1999). This finding supports the evidence provided by a number of authors (Brackenridge, 1997; Burke 2001; Crosset, 1989; David 2004; Ryan, 1995) who have documented examples where the coaches craving for success created the underlying force behind their controlling behaviour. Whilst it is acknowledged that the coaching process does confer power with the coach in the same way that being a parent does, where the athletes have reported feeling scared, petrified and frightened by their coach it is indicative of coaches misusing their power. It is this aspect that is represented in the concept map, and is supported by the responses from the athletes.

A coach's reputation is built upon the athletes they produce. If the potential of a child athlete is recognised externally this elevates the position of the coach within the sport. The coach then has a lot more to lose if this athlete does not achieve

success. The resulting coaching methodologies may be centred on a 'win at all costs' approach. This then creates a dilemma for the young performer who wants to succeed, but no longer enjoys the training. This might account for the perceived change in behaviour described by all of the athletes once they were identified as elite.

What emerges from these recollections is that these athletes were being coached in a climate of fear supporting Garbarino et al's.'s (1986) assertion that 'verbal assaults on the child creates a climate of fear' (p. 21) and 'psychological terror' (p. 21). This also supports Vissing et al. (1991) who identified constant aggressive verbal assaults as being indicative of emotional abuse. The majority of these athletes had to endure this type of behaviour on a regular basis.

Overall this study found that research methods previously used to investigate relationships in a family setting can be utilised to theorise and understand the relationship between coach and the elite child athlete. They seem to provide a workable framework within which the complex dynamics of the coach athlete relationship can be explored, and a better understanding of the experiences of the elite child athlete can be developed. It is also worth noting that the reliability of the interview framework was established, due to the fact that interviewees either answered all questions in relation to any specific behaviour, or stopped after answering 'no'. Future research is needed to build upon this with a view to establishing sport specific theory to understand the unique issues in this context.

These results provide strong support for the use of Garbarino et al's.'s framework of emotionally abusive behaviour being appropriate to utilise within a sports context. Many of the athletes reported having residual emotional and psychological problems.

Implications for the concept map

Overall the findings supported the predicted patterns of the concept map. Consequently, because evidence was found at each level of questioning that reflected this pattern it is appropriate to accept the concept map as being valid and reliable. From these findings it is possible to progress this to create a theoretical model which not only contains all the elements of the concept map but also describes the relationship between them. (See Figure 3.2)

Emergent Questions

The results from this research may lead one to hypothesise that the reported experiences of these athletes are not likely to be isolated incidences but may be indicative of accepted coaching practice of elite child athletes. However, it would be unwise to make generalizations at this stage given that this study had a small sample and it leaves questions unanswered. Further investigation is needed to examine child

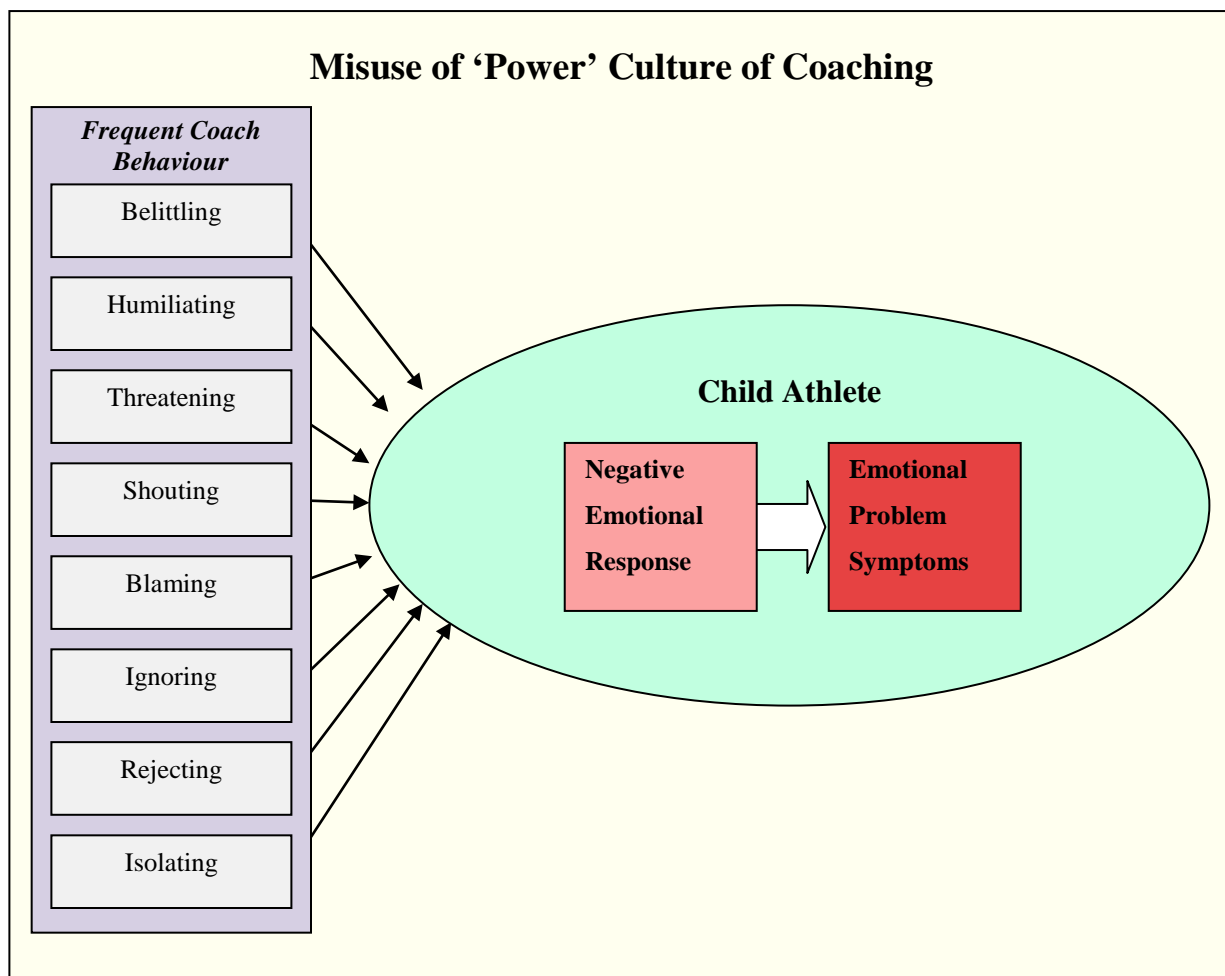


Figure 3.2 Theoretical Model 1 of the Process of Negative Emotional Response in Child Athletes

athletes' retrospective accounts of their experiences, and if the experiences described in this study reflect those of other child athletes competing in a range of different sport contexts. Specifically, are these reported accounts reflective of a wider population of elite child athletes? Do these reflect the experiences of all children participating in sport at any competitive level from recreational to international?

In order to answer these questions of a larger population it is appropriate to attempt to develop a psychometric instrument that is anchored in the concept map of this study and designed specifically to test the theoretical model that has emerged from it. Thus this is the focus of the next study.

Chapter Four

Study Two: Developing the Sport Emotional Response Questionnaire (SER-Q)

Introduction

The assessment and measurement of child abuse remains one of the most important challenges facing both researchers and practitioners for, as Manly (2005) stated, ‘to date measurement strategies have been inadequate’ (p. 425), and they have remained so ever since. This is compounded by a paucity of standardized, reliable, and valid measures which would help researchers and policy-makers identify the existence of child abuse even within a family context (Fink, Bernstein, Handlesman, Foote & Lovejoy, 1995; Kaufman-Kantor et al., 2005), let alone within a sporting context. Within the world of child maltreatment there has been a reliance on the use of unstructured clinical interviews, reports from social services, clinical and hospital records as the primary source of assessing the existence of child maltreatment (Bernstein et al., 1994). But this can be problematic as a lack of consistency in language and reporting methods produces results that are difficult to interpret. Historically, the defining and measurement of child maltreatment has proceeded through several stages beginning with anecdotal accounts from case studies, which tended to focus on the characteristics of maltreated children. From this point

research attempted to differentiate between maltreated and non-maltreated populations to highlight the consequences of different abuse typologies. Typically the focus was first on physical abuse and then sexual abuse. The most recent developments have been in the assessment and measurement of emotional abuse and neglect.

The focus of this review is to discuss the issue of ‘measurement’ within the field by examining key measurement methodologies within child maltreatment generally, and more specifically within emotional and psychological abuse. There have been three distinct strands of development in this area which are:

4. Measurement of prevalence and incidence
5. Measurement of symptoms for clinical diagnosis
6. Measurement to determine classification of abuse typologies.

This review will highlight the major contributions that have been made and review specific instruments and methods of validation.

Measurement of Prevalence and Incidence

One of the first challenges presented to both researchers and practitioners has been to establish good statistical evidence on the prevalence and incidence of different child maltreatment typologies as a means of influencing policy and practice. In this literature ‘prevalence’ of child abuse refers to the proportion of the defined population (usually adult) who have been abused during a specified time period - usually childhood. ‘Incidence’ refers to the number of new cases occurring in a

defined population (usually children) over a year (Creighton, 2004). The incidence rate will only consider new cases in any given year, because children may be on an 'at risk' register for several years, the incidence rate therefore avoids the possibility of these children being counted several times over and giving a false impression of changes to child maltreatment. To this end some specific measurement methodologies that have been employed.

In the US the National Incidence Surveys (NIS) have been the primary source of data collected on child maltreatment. These were initiated in 1979/80 (NIS-1) and were congressionally mandated by the National Centre on Child Abuse and Neglect (NCCAN). The surveys sought to establish reliable statistics on the size of the problem through data collected by community professionals and Child Protective Services (CPS) across all abuse typologies. Children who were investigated by CPS and those who were not, but were known to community professionals, were included in the studies. The NIS employed standardised definitions under each category of abuse, and children were considered either at risk of harm or endangerment. Thus, for the NIS-3 5,612 professionals and 800 non-CPS agencies were recruited to submit data on children that they were aware of who met the criteria for being either at risk of harm or endangerment from any form of abuse. Estimated weighted statistics were then calculated to inform all agencies as to the extent of the problem. Data revealed that there had been a significant rise in a sixteen year time period across all abuse typologies with respect to estimated incidence on both the harm and endangerment definitions. For example, there was a 333% increase in the estimated

number of emotionally neglected children from 1980 to 1996. This method relied on the expertise of child protection workers to describe and categorise the children as abused. Whilst they were provided with guidelines regarding the different abuse typologies and risk criteria, the method could be described as largely subjective and as such, open to variations in interpretation. However, these surveys still produced valuable data and important insights into an otherwise uncharted area, and provided evidence to support the allocation of resources into the area of child maltreatment (Herrenkohl, 2005).

Prevalence studies have generally focused on sexual abuse and there have been a number of studies that have been undertaken in such countries as Canada, Finland, New Zealand and US (Creighton, 2004). The largest prevalence study of child maltreatment in the UK was published by the NSPCC in 2000 (Cawson, Wattam, Brooker & Kelly, 2000). This study formed the cornerstone of the FULL STOP campaign that was launched in 1999 by the NSPCC and its primary aim was to provide sound data from which professionals, policy makers and researchers could benefit.

The study focused on the childhood experiences of 18-24year olds and relied on retrospective self report measures. The sample of 2,869 young people was drawn from all parts of the UK and was of mixed ethnicity with the majority being white (92%). The researchers stated that the choice of age group of the participants was deliberate so that they ‘ were young enough to be close to their childhood, for whom

the effects of their childhood experience on the young adult would be assessable, but relatively uncontaminated by later stresses of adult life' (p. 9).

The study used questionnaire based interviews that spanned all abuse typologies, these were defined as family relationships; amount of supervision and freedom; physical care; verbal, physical and violent treatment; bullying and discrimination; emotional and psychological treatment and sexual treatment. Respondents were asked to retrospectively report on their experiences of their parental/caregiver behaviour when they were children. A range of behaviour statements were presented, both positive and negative, and respondents were asked to indicate the frequency with which they had experienced them. Where respondents indicated that they had experienced the negative behaviours they were asked follow up questions to put their experiences into context. With regards to emotional abuse the researchers utilised conceptual classifications from Garbarino et al's. (1986) and Brassard et al., (1993) and defined it as occurring on a continuum rather than as a one off experience. Seven dimensions were constructed which included; control, domination, humiliation, withdrawal, terrorising, antipathy, proxy attacks and threat. Emotional maltreatment was considered to have occurred if a respondent reported having experienced at least four of the seven dimensions.

Results were primarily described as percentage frequencies and indicated that 6% of the sample population had experienced four or more of the emotional maltreatment dimensions. The research did not attempt to validate the instrument as such; rather,

previous research was used to create the framework for the design of the interview questionnaire and allowed for both quantitative and qualitative data to be collected.

Measurement of Symptoms of Abusive Behaviour

It has been well documented (see review) that the consequences of childhood abuse can be observed through discernible behaviour patterns such as depression, low self-esteem, negative self-concept, to name a few (Bingelli et al., 2001). Research that has focused on measuring abuse through this approach took the view that if a child had experienced trauma there would be residual symptoms which can be identified, rather than that the trauma itself could be directly observed.

The Trauma Symptom Checklist (TSC-33) was developed by Bierre and Runtz (1988) and was designed as psychometric instrument that could be used in clinical research as a measure of the traumatic impact of long-term child abuse. The instrument was designed to be used either as part of a clinical assessment or as a pencil and paper tool. The instrument was constructed to be used on an adult population and focused on the resultant symptoms that are expected to occur if a person has experienced long-term child abuse. The designers of this instrument were primarily working within the area of sexual abuse, and used the TSC-33 as a means of discriminating between a known sexually abused population (n=133) and a non-abused population of women (n=62). The TSC-33 was a 33item questionnaire that specified a number of symptoms and asked respondents to identify the frequency with which they have experienced these in the last two months. The TSC-33

identified 5 sub-scales which were; dissociation, sleep disturbance, anxiety, depression and post-sexual abuse trauma hypothesised. The internal validity of the instrument was assessed with Cronbach alpha which was recorded as an average of 0.71 for each of the sub-scales, and 0.89 for the total. The results indicated that the TSC-33 was able to discriminate between sexually abused and non-abused women in 79% of cases. Further univariate analysis revealed significant differences between the two populations on each of the sub-scales and the total. The authors concluded that the TSC-33 was a 'fair discriminator' (p.159) of sexual abuse victims, but they stressed that it should not be considered as a 'litmus test' for child sexual abuse.

From this original instrument adaptations and expansions have been made. These have included; The Trauma Checklist-40 which was designed by Elliot and Bierre (1992) and contained additional items relating to the sexual abuse trauma index. The Trauma Checklist for Children (TSC-C) was a further adaptation of the TSC which was aimed primarily at assessing the psychological functioning of children (Bierre, 1996) it was a 54-item self-report measure which asked respondents the frequency that they had been experiencing particular symptoms. It identified the subscales of anger, depression, posttraumatic stress, anxiety, dissociation and sexual concerns. The instrument was designed to be accessible to 8-16 years olds and as such was constructed with age appropriate language.

The Childhood Trauma Questionnaire (CTQ) is another inventory that was developed specifically to examine the links between childhood abuse and

psychopathology. It was developed by Bernstein et al., (1994) and was validated with a clinical population who had all been diagnosed to have psychological pathologies. The 70-item questionnaire aimed to measure both separate and combined effects of different abuse typologies. Each item referred to a specific event or behaviour and asked respondents to indicate the frequency that they had experienced them. Through factor analysis 5 abuse factors emerged. These were identified as emotional abuse, physical abuse, sexual abuse, and emotional and physical neglect. All subscales yielded good internal reliability with Cronbach alphas ranging from 0.78 to 0.86. This instrument has been widely used within clinical settings and has produced sound evidence of convergent validity with other measures of psychopathology such as depression and anxiety (Bernstein, Ahluvalia, Pogge & Handelsman, 1997; Paivio, 2001; Paivio & Patterson, 1999;). However, more recently the validity of the CTQ has been examined with a non-clinical population. Paivio and Cramer (2004) tested its validity on a student population of 450. Using principal component analysis they found that, with the exception of physical neglect, the five factor solution was largely replicated.

Another instrument that is worthy of consideration, although not specifically designed to measure maltreatment is the Life Experiences Survey (LES), developed by Sarason, Johnson and Siegal (1978). This was a self report measure that contained 57 items relating to specific life events that an individual may have experienced in the past year. The respondents were asked to assess the emotional impact that each event had on them on a 7-point Likert scale ranging from extremely

negative to extremely positive. What the instrument achieved was a means of examining how different individuals react to the same life event, thus it was acknowledged that it is the individual response that determines perceived stress in any given situation not the event itself.

Measuring Exposure to Abusive Behaviour

The construction of measures that have sought to determine if individuals have been exposed to a particular maltreatment have generally tried to identify specific behaviours that are considered to be consistent with the theoretical construct for any given abuse typology. Thus; 'Homogenous maltreatment sub-types refer to an operational definition that examines a set of caretaker behaviours that reflect a domain of similar (or internally consistent) maltreating behaviours' (Herrenkohl, 2005, p. 418). Consequently the challenge has been to develop inventories that reflected the specific behaviours of any abuse type and seek to establish agreement between these specific behaviours as a means generating homogenous categories. Whilst there has been considerable agreement in the domains of sexual abuse and physical abuse (Runyan et al., 2005), emotional abuse and neglect have been more difficult to establish. This may reflect the problem that, in order to do this, first there has to be an operational definition of the particular caretaker behaviour that meets the construct parameters. As has been previously identified (see review) this has proved difficult with emotional abuse. Moreover, as has been previously mentioned it is the individual perception that determines whether or not an event is perceived as

traumatic, and therefore in constructing parameters of emotional abuse it must be considered from the child's perspective and focus on their emotional responses.

Guidance in developing such instruments was offered by Herrenkohl (2005) in his paper discussing validity issues with child maltreatment measurement. With respect to ensuring that an inventory addresses the central issue that the behaviours identified reflect the specific abuse domain, he suggested that; 'internal consistency reliability can be computed to index the degree of homogeneity among the behaviours related to each dimension. Each behaviour could be dichotomously coded (as present or absent) or by frequency' (p.418). Moreover, he suggested that the use of factor analysis and inter-correlations between the behaviours strengthen the inventory's validity.

The Maltreatment Classification System (MCS) devised by Manly, Cicchetti and Barnett (1994) assessed six dimensions of abuse which were type, severity, frequency, developmental period, separation from caregiver, and the perpetrator. The MCS was developed primarily to enhance reliability in labelling instances of abuse and to aid professionals working within the child protection services (CPS) to substantiate allegations of maltreatment. The instrument formed the basis of an assessment interview conducted by the CPS and took the form of identifying specific adult behaviours under each abuse typology and recording details relating to the six dimensions, severity and frequency were measured on a 5-point Likert scale. The different types of abuse were classified as physical abuse, sexual abuse, failure to

provide, lack of supervision, emotional maltreatment, moral/legal maltreatment, educational maltreatment and caregiver substance abuse. These classifications conceptualised acts that were judged by professionals to be instances of maltreatment, and allowed for distinctions to be made between maltreatment types on the basis of adult behaviour. The MCS also enabled distinctions to be made with regards to the frequency and severity of the abuse, which in relation to emotional abuse has been at the cornerstone of theoretical understanding. However, the authors stated ‘future efforts need to move away from validation through the consensus of opinion and toward a system that is validated through the documented harm these acts cause to children’ (p. 372). The MCS has been widely adopted both as a practitioner assessment tool, and as a research tool for comparing different populations. It has also been developed further by English et al. (1997) who produced the Modified Maltreatment Classification System (MMCS) which adapted some of the six dimensions. This measure has been used extensively in the LONGSCAN studies in the USA comparatively with the NIS instruments and CPS assessment interview protocols. Results from these studies have shown that there was an 82% agreement between all these measures on sexual abuse, physical abuse and physical neglect, but only a 37% agreement between them on emotional abuse. As commented on by Herrenkohl (2005) when he summarised; ‘robust definitions of these sub types (emotional maltreatment and neglect) remain elusive’ (p. 417). The implication from this work was that better systematic procedures were needed for gathering information about emotionally abusive behaviours. To date this has proved to be problematic which might suggest that efforts would be better focused on the

child emotional responses to adult behaviour, rather than solely focusing on the behaviour itself.

The Abuse Behaviour Inventory (ABI) was designed by Shepard and Campbell (1992). The purpose was to measure abusive behavioural experiences of women, from their partners. The instrument was constructed as a 30 item questionnaire with 20 items contributing to a psychological abuse sub-scale and 10 items to a physical abuse sub-scale. Each item details a specific behaviour which was deemed to be representative of the abuse typology, respondents were asked to recall the frequency with which they had experienced each behaviour on 5 point Likert scale (from 'never' to 'very frequently'). The reported alpha coefficients as a measure of internal consistency for each sub-scale ranged from 0.7 to 0.93, with 0.92 for the total. Thus the ABI was considered to have good internal reliability. Whilst this instrument has been used primarily as a means of determining abusive experiences of adults in relationships it has also been used (Brandyberry & MacNair-Semands, 1998) to explore retrospective childhood experiences. The instrument was adapted with the stem of each item asking respondents to reflect on the behaviours itemised with respect to their childhood experiences of their parental behaviour. This methodology has proved itself to be a useful one when investigating abuse and may be a fruitful way to approach the current study.

The Psychological Maltreatment Inventory (PMI) was developed by Engles and Moisan (1994) as a retrospective assessment of the negative behaviour of parents,

which had been experienced as a child. The PMI, was a 25 item questionnaire and was validated with 118 clinical outpatients. Respondents were asked to reflect on a number of examples of negative parental behaviour and assess if they had experienced them during their childhood and what the negative impact of them had been.

Factor analysis was employed to identify emergent factors from the five psychological categories identified in the literature. Two factors emerged: that of emotional neglect, and hostile rejection. These factors related well with other measures of adult psychological dysfunction such as depression. This instrument has been used primarily within a clinical setting, and as such has provided good comparative data between other measures such as the Beck Depression Inventory (1996).

Sanders and Becker-Lausen (1995), developed the Child Abuse and Trauma Scale (CAT scale), as a retrospective assessment of childhood trauma across three domains of childhood abuse. These were negative home atmosphere, neglect, sexual abuse and punishment. The goal of the instrument was described as ‘the measurement of the individual’s present subjective perception of the degree of trauma present in his/her childhood’ (p.317). The 38 item CAT scale presented a range of specific behaviours that were identified as being indicative of the abuse typologies and asked respondents to reflect on their childhood experiences of their parental/caregiver behaviour and assess the frequency of such behaviour on a 5-point Likert type scale

(from 0=never; to 4= always). Validation of the instrument was achieved by administering the instrument to 837 college students. Data was then analysed through factor analysis which revealed three factors accounting for 38% of the variance leading to the three subscales. Internal consistency was measured using Cronbach alpha identifying 0.90 for the overall CAT and 0.86 for negative home atmosphere, 0.76 for sexual abuse and 0.63 for punishment subscale. Test-retest reliabilities were also conducted and produced significant results for the overall CAT ($r=0.89$, $p<.001$) and for each of the subscales (negative home environment, $r=0.91$, sexual abuse $r=0.85$ and punishment $r=0.71$). The authors commented that the CAT scale represented an acceptable approach to retrospective assessment of negative childhood treatment and allowed for subjective evaluation of the severity of those experiences.

Sanders and Becker-Lausen (1995, p. 320) concluded that the CAT scale 'taps into a unified, though clearly multidimensional construct, which may have considerable predictive value'. This and the ABI and PMI instruments provide a strong case for the development of other, similar instruments of research, which would help access childhood experiences from a retrospective, subjective perspective.

Psychometric measurement of abuse in sport

Work by Martin (2003) attempted to validate a psychometric instrument to determine emotional and sexual abuse by coaches. 20 coach behaviour items were generated based on previous studies, although these studies were unspecified, which

sought to reflect behaviour consistent with sexual and emotional abuse. Items were vetted for appropriateness by a panel of undisclosed experts. 140 male and female US college tennis players were recruited to participate in the study, which was conducted using a face-to face survey method. Participants were asked to identify the appropriateness of each behaviour item in an attempt to identify accepted coach behaviour.

Factor analysis identified four abuse factors: social invitations, invasion of personal space, personal compliments and inappropriate physical contact. These accounted for 66% of the variance. Internal reliability was calculated for each of the subscales using Cronbach alpha and was reported as being over 0.85 for all subscales.

Whilst the instrument claimed to identify emotionally abusive coach behaviour, close scrutiny of the items revealed a lack of a recognisable theoretical framework with respect to previously acknowledged behaviour patterns consistent with emotional abuse. Consequently, whilst this may be a valid instrument with respect to sexual abuse within a sports context, its validity with regard to emotional abuse is questionable.

Emergent measurement issues to be considered

In examination of the range of methods employed in the child maltreatment literature, there are a number of accepted protocols that have been used in the design of instruments which are important when considering future instruments:

1. An instrument that seeks to measure a specific abuse typology must clearly demonstrate that the behaviours used to elicit responses are anchored within an appropriate theoretical construct, and be demonstrably representative of that abuse domain. Thus evidence of construct validity should be presented.
2. Objective behaviours which are assigned to an abuse typology must be tested to demonstrate their homogeneity through such means as internal reliability measures. Factor analysis is an appropriate method to identify homogenous sets of behaviours and to determine the number of distinct domains, if there is more than one.
3. An inventory needs to demonstrate discriminant validity by ensuring that it can distinguish between maltreated and non-maltreated populations. This can be achieved through the use of frequency scaling.
4. Retrospective self-report measures have been shown to be a valid and reliable method to access childhood experiences.

Therefore, in designing a new instrument careful consideration of all these well tested and proven aspects must be given.

Aims of the study

The aims of this present study in light of the above are therefore:

- To develop an instrument that tests the theoretical model as described in Study One.

- To develop a valid and reliable instrument suitable for use with large populations.
- To utilise the theoretical construct of emotional abuse as described by Garbarino et al's. as the basis for behaviours, but anchored within a sports context.
- To identify if the eight behaviours previously described as emotionally abusive by Garbarino et al's. (1986) are discrete and separate domains within a sport context
- To use a retrospective self-report design.
- To design an instrument that demonstrates discriminant validity
- To design an instrument that demonstrates high internal reliability.

Method

Participants

The participants were 229 student athletes (148 male and 81 female) who were enrolled in a university undergraduate Sport Science degree program in the UK. This undergraduate program was chosen as it has the highest concentration of athletes within the University. They were athletes from 28 different sports who had competed at the following levels – recreational level =3 (1.3%) club level = 26

(11.4%); regional level = 95 (41.4%), national level = 60 (26.2%), international level = 45 (19.7%). Elite athletes were defined as those who were competing or had competed at the National and International levels. The percentage of the sample population in each age category was as follows; 18-21yrs=191 (83.4%); 22-25yrs=28 (12.2%); 26-30yrs=4 (1.7%); 31yrs and over=6 (2.6%). The mean age was 20.5 years.

Procedures

Procedures were carried out in line with the Brunel University Research Ethics Guidelines. Participants were volunteers recruited from a number of undergraduate sport science classes and participant consent was obtained. Participants were given only one questionnaire which was completed anonymously. The investigator read the instructions to the participants on how to complete the questionnaire. Participants were instructed to complete the questionnaire based on coaching behaviour that they had experienced when they were competing at their highest level as a child athlete (i.e., under age 18). From the initial 261 questionnaires distributed, 32 were not completed fully and so were discarded, leaving 229 for analysis.

Instrument

The questionnaire was divided into two parts; the first identified key demographic information about the participants. Information was collected about gender; current

age; sport that they participated in; the highest level reached as a child competitor (under 18), and gender of their coach.

The second part of the development of the questionnaire was the Sport Emotional Response Questionnaire (SER-Q). As in Study One it was developed as a retrospective self-report measure of athlete perception of their coaches' behaviour, when they were competing at their highest level, and how it made them feel. The measure sought to enable athletes to reflect on their personal experiences as child athletes and to be sensitive to their own evaluation of them.

The SER-Q utilized the original in-depth interview source data from Study One from the 12 ex-elite child athletes to generate the items. The eight categories proposed by Garbarino et al's. - belittling, humiliating, shouting, rejecting, threatening, scapegoating, isolating, and ignoring were used as the framework for the questionnaire design. From these responses 32 items were generated for the initial version of the SER-Q. Each item thus was grounded in the reporting of real-life experiences that athletes had encountered with their coaches. This use of concrete events rather than subjective experiences has been shown to enhance recall of childhood experiences (Paivio & Cramer, 2004), and ensures that each item was anchored in the conceptual framework outlined in Study One whereby each item is a real-life example of coach behaviour that had been experienced and which had resulted in a negative emotional response from the athlete. Each emotional abuse category had four items generated from the original source data of Study One. Table

4.1 details examples from the interviews and the resultant objective behaviour item generated for the SER-Q (see Appendix A for complete SER-Q).

Table 4.1 *Items Generated for the SER-Q Using Source Interview Data from Study One*

Emotional Abuse Category	Source data examples. ('A'. refers to athlete number)	Items Generated for SER-Q	Item Number
Belittling	Very personal, like he would call me fat (A5)	My coach criticised my weight/body shape	1
	He wasn't attacking my hockey skills anymore he was attacking my personality (A12)	My coach criticised my personality	2
	Told me I was stupid (A4) You get told you're stupid all the time (A11)	My coach told me I was stupid	3
	Useless, just a total lack of self-esteem (A9)	My coach said I was useless	4
Humiliation:	So that was very humiliating for me in front of my team-mates (A7) He put me down(A3)	My coach put me down in front of others	5
	He said he was ashamed of me (A12)	My coach told me they were embarrassed by me	6
	He always managed to find fault...so therefore I was humiliated (A4)	My coach always managed to find my faults	7
	Upset and embarrassed in front of other people(A3) She does it to make me feel small and so that I know she is in charge (A10)	My coach made me feel small	8
Shouted at (verbal abuse):	Called me names. You're crap (A6) He would shout nasty comments all the time (A4)	My coach made nasty personal comments about me	9
	When this guy was hurling abuse at me sometimes I would breakdown and cry (A4)	My coach talked to me with no respect	10
	I just wanted to leave when he shouted all the time(A11)	My coach verbally attacked me by shouting at me	11

	He constantly shouted at me (A12)		
Rejection:	It was really aggressive and personal (A11)	My coach talked to me aggressively	12
	If you had mucked up then you were definitely not going to play in that game and that was your punishment (A12)	My coach deliberately didn't pick me for competition	13
	He would just turn his back on me like I didn't exist (A8)	My coach walked away from me in training	14
	You are rejected if you are not learning quick enough (A7)	My coach rejected me because I couldn't do a skill/move	15
	I felt worthless as a person(A2) Like I was worthless and not a person (A4)	My coach made me feel worthless	16
Threatening	He definitely meant to hurt you (A3)	My coach threatened to physically harm me	17
	He threatened not to put me into certain trials or not to let me play important games (A3)	My coach threatened to pull me from the next competition	18
	He did it to show me that he could take away my chance of success(A2) He would always say that I needed him and without him I was nothing (A4)	My coach said he/she could ruin my career	19
	It was like always a threat to make you train (A7)	My coach said they'd make training harder for me	20
Scape-goating/ Blaming	If I did something wrong then it was my fault and I had let him down (A2)	My coach said mistakes were always my fault	21
	He would always be telling me that it was my fault, like I did it on purpose (A4)	My coach said bad training sessions were my fault	22
	I played defence and when goals went in he shouted at me from the side telling me it was my entire fault (A12)	My coach blamed my team-mates failures on my performance	23
	He loved telling me that it was all my fault, and then	My coach blamed me for other peoples mistakes	24

	you feel like you had let everyone down it made me feel very guilty (A9)		
Isolation	I would have to skip in the corner while the other girls were training(A2)	My coach treated me differently to others	25
	She did send me out of the gym, it was definitely done to punish me(A6)	My coach sent me home during training	26
	I would have to train in the corner for half an hour...I hated being isolated because you feel so alone(A2) He would make you do conditioning alone to punish you for what you did wrong (A5)	My coach made me train on my own	27
	I was sent out of the gym for 30 minutes (A5)	My coach sent me away from training for a period of time	28
Ignoring	If my work wasn't reaching the required standard then he would definitely ignore me (A8)	My coach ignored me	29
	After bad performances she just ignored me and walked away (A3)	My coach walked away from me after a bad performance	30
	Although the ignoring was worse when I was injured (A6)	My coach ignored me if I was injured	31
	If I did something wrong he would also ignore me (A4)	My coach didn't acknowledge me in training	32

The stem 'my coach ...' preceded each item. There were two questions that were asked in relation to each item. The first was the frequency with which the athlete had experienced the behaviour. Each item was scored on a 5-point Likert type scale of 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*very often*) and 5 (*always*). This model of questioning was deemed to be appropriate and in accordance with other existing

instruments in the field of abuse (Sanders & Becker-Lausen, 1995). The second scale focused on the emotional response, by asking respondents to consider how it made them feel. This was done for each of the 32 items. This second scale was thought to be an important addition, as the emotional response to any behaviour is an inseparable part of the experience of being abused (Findlay & Corbett, 1999). It may be argued that it is the subject's perception of abuse and their emotional response to it that is their ultimate reality (Campos, Frankel & Camaras, 2004), and as such they can be deemed the only experts on their own experiences. Their emotional response was scored on a 7-point Likert type scale of 1 (*very negative*), 2 (*negative*), 3 (*slightly negative*), 4 (*no effect*), 5 (*slightly positive*), 6 (*positive*), and 7 (*very positive*) in accordance with Sarason et al., (1978). This scale was devised as 'a central zero' scale, with extremes of high and low on each side of the neutral response of 'no effect'.

A third scale was also included which asked the athletes to determine the effect each behaviour item had on their performance. This scale was not discussed here but will be considered in Study Five.

Data Analysis

The analysis of the data was constructed to ensure that the SER-Q could be tested for both validity (in accordance to the previously outlined constructs), and reliability. This data analysis built on the work from Study One which demonstrated construct validity of the theoretical model. This was anchored in the construction of

the questionnaire, and so required no further post hoc testing. However, other elements of validity and reliability were specifically analysed in accordance with previous methodologies used to validate instruments to measure abuse, and reviewed above.

The following were tested for:

- *Internal Reliability (homogeneity)*: In order to establish the homogeneity of the items to their respective behaviour category internal reliability was measured using Pearson Product Moment Correlation Coefficients for the inter-correlations of all 32 items in any given behaviour category (see Table 4.2-4.9). By establishing which items had the weakest correlations, by calculating the smallest mean values of the correlations, it could be determined which remaining three items represented the best homogeneity for the specific behaviour category. Secondly, Cronbach (1955) alpha values were calculated on the remaining three items in each behaviour category to determine if the internal reliability was improved by removing the item with the lowest mean correlation coefficients (see Table 4.2-4.9). Further Cronbach (1955) alpha values were conducted on the original 32 item total and 24 item totals to determine the overall strongest internal reliability.
- *Content Validity*: Content Validity from the theoretical model (see Study One, p.107) predicts that the eight behaviour domains as theorised by Garbarino et al's., are distinct and separate. Principle Components Analysis was conducted to test this. This analysis was also used to further ensure

homogeneity of all the items contributing to the SER-Q (See Tables 4.10 and 4.11).

- *Predictive Validity*: Predictive Validity from the theoretical model (see Study One, p.107) predicts that if an athlete experiences a behaviour frequently there will be a negative emotional response. This was analysed through correlations between the frequency response and the emotional response of each item (see Tables 4.11 and 4.12).
- *Discriminate Validity*: Discriminate Validity from the theoretical model (see Study One, p.107) predicts that if the athletes report no experience of the behaviours there will be no emotional response either positive or negative. This was analysed through an examination of the frequency response as a function of the emotional response (see Table 4.14).

Results

Internal Reliability (homogeneity)

The first focus of the analysis was to establish the SER-Q internal reliability and validity. All four items that contributed to each emotional abuse category were tested for internal reliability using Cronbach (1955) alpha values. Next, all items that were hypothesised to contribute to each category of emotional abuse were inter-

correlated. Items that exhibited the weakest correlation were then removed and internal reliability was tested for again using Cronbach (1955) alpha values.

The following tables (Table 4.2-Table 4.9) detail the initial internal reliability analysis for each behaviour category. For each of the eight behaviours; belittling, humiliating, shouting, rejecting, threatening, scape-goating/ blaming, isolating, and ignoring, the four items that contributed to the category were correlated with each other to determine the item that correlated least well with the other items. Cronbach (1955) alpha values were then conducted on the remaining three items and compared to similarly calculated Cronbach (1955) alpha values of the four items. Where the internal reliability was improved, removing the lowest correlated item was considered as a means of improving the overall internal reliability of the SER-Q.

Table 4.2 *Pearson Product Moment Correlation Coefficients (r) between all Items of 'Belittling'*

Questionnaire Items	1	2	3	4
1	1.000	0.357	0.336	0.435
2	0.357	1.000	0.612	0.514
3	0.336	0.612	1.000	0.648
4	0.435	0.514	0.648	1.000
<i>Mean Values</i>	<i>0.376</i>	<i>0.494</i>	<i>0.532</i>	<i>0.532</i>

All items significant at the 0.01 level

Item 1 has the lowest mean correlations, therefore to hypothetically increase internal reliability, it should be removed. ($\alpha = 0.764$ for all items; $\alpha = 0.793$ for items 2, 3 and 4)

Table 4.3 *Pearson Product Moment Correlation Coefficients(r) between all Items of 'Humiliating'*

Questionnaire Items	5	6	7	8
5	1.000	0.534	0.382	0.665
6	0.534	1.000	0.328	0.527
7	0.328	0.328	1.000	0.408
8	0.665	0.527	0.408	1.000
Mean Values	0.509	0.463	0.372	0.533

All items significant at the 0.01 level

Item 7 had the lowest correlations, therefore to hypothetically increase internal reliability, it should be removed. ($\alpha=0.761$ for all items; $\alpha=0.798$ for items 5, 6 and 8)

Table 4.4 *Pearson Product Moment Correlation Coefficients (r) between all Items of 'Shouting'*

Questionnaire Items	9	10	11	12
9	1.000	0.697	0.570	0.470
10	0.697	1.000	0.544	0.519
11	0.570	0.544	1.000	0.725
12	0.470	0.519	0.725	1.000
Mean Values	0.509	0.463	0.372	0.533

All items significant at the 0.01 level

Item 12 had the lowest mean correlation, but decreases internal reliability if removed ($\alpha=0.847$ for all items; $\alpha=0.807$ for items 9, 10 and 11).

Table 4.5 *Pearson Product Moment Correlation Coefficients(r) between all Items of 'Rejecting'*

Questionnaire Items	13	14	15	16
13	1.000	0.206	0.217	0.287
14	0.206	1.000	0.450	0.562
15	0.217	0.450	1.000	0.492
16	0.287	0.562	0.492	1.000
<i>Mean Values</i>	<i>0.579</i>	<i>0.586</i>	<i>0.613</i>	<i>0.571</i>

All items significant at the 0.01 level

Item 13 had the lowest mean correlation, therefore to hypothetically increase internal reliability, it should be removed ($\alpha=0.690$ for all items; $\alpha=0.730$ for items 14, 15 and 16).

Table 4.6 *Pearson Product Moment Correlation Coefficients(r) between all Items of 'Threatening'*

Questionnaire Items	17	18	19	20
17	1.000	0.289	0.435	0.432
18	0.289	1.000	0.288	0.445
19	0.435	0.288	1.000	0.343
20	0.432	0.445	0.343	1.000
<i>Mean Values</i>	<i>0.385</i>	<i>0.340</i>	<i>0.355</i>	<i>0.406</i>

All items significant at the 0.01 level

Item 18 had the lowest correlations, but decreases internal reliability if removed. ($\alpha=0.683$ for all items; $\alpha=0.622$ for items 17, 19 and 20)

Table 4.7 *Pearson Product Moment Correlation Coefficients(r) between all Items of 'Blaming'*

Questionnaire Items	21	22	23	24
21	1.000	0.768	0.522	0.530
22	0.768	1.000	0.592	0.575
23	0.522	0.592	1.000	0.634
24	0.530	0.575	0.634	1.000
<i>Mean Values</i>	<i>0.607</i>	<i>0.645</i>	<i>0.582</i>	<i>0.579</i>

All items significant at the 0.01 level

Item 24 had the lowest correlations, but decreases internal reliability if removed.

($\alpha=0.857$ for all items; $\alpha=0.834$ for items 21, 22 and 23)

Table 4.8 *Pearson Product Moment Correlation Coefficients(r) between all Items of 'Isolating'*

Questionnaire Items	25	26	27	28
25	1.000	0.227	0.380	0.247
26	0.227	1.000	0.265	0.379
27	0.380	0.265	1.000	0.304
28	0.247	0.379	0.304	1.000
<i>Mean Values</i>	<i>0.284</i>	<i>0.290</i>	<i>0.316</i>	<i>0.310</i>

All items significant at the 0.01 level

Item 25 had the lowest correlations, therefore to hypothetically increase internal reliability, it should be removed. ($\alpha=0.566$ for all items; $\alpha=0.577$ for items 26, 27 and 28)

Table 4.9 *Pearson Product Moment Correlation Coefficients (r) between all Items of 'Ignoring'*

Questionnaire Items	29	30	31	32
29	1.000	0.659	0.518	0.697
30	0.659	1.000	0.571	0.546
31	0.518	0.571	1.000	0.575
32	0.697	0.546	0.575	1.000
<i>Mean Values</i>	<i>0.624</i>	<i>0.592</i>	<i>0.554</i>	<i>0.606</i>

All items significant at the 0.01 level

Item 31 had the lowest correlations, but decreases internal reliability if removed.

($\alpha=0.857$ for all items; $\alpha=0.834$ for items 29, 30 and 32)

Results indicated that in four of the categories; belittling, humiliating, rejecting and isolating removing the lowest correlating item slightly improved internal reliability. However the reverse was true for shouting, threatening, blaming and ignoring. Furthermore when the overall internal reliability was calculated for 32 items (n=32) it was 0.954, compared to 0.950 for 24 items. Consequently, it was considered that the removal of items at this stage did not strengthen the overall reliability of the instrument and so the next phase of the validation process was conducted with all 32 items.

Content Validity

To determine the SER-Q's content validity the data were subjected to a factor analysis using SPSS version 15.0. Specifically, a Principal Components Analysis was undertaken using the data from the 5-point frequency component of the questionnaire. This was done to establish whether all the items contributed to the eight hypothesized domain of emotional abuse, or whether more, or fewer factors needed to be considered. Secondly, following the establishment of the factors, the SER-Q's internal consistency was measured using Cronbach (1955) alpha values.

Table 4.10 *Principal Components Analysis of the SER-Q*

Component	Eigen values	% of Variance	Cumulative % of Variance
1	14.166	44.267	44.276
2	1.769	5.527	49.795
3	1.353	4.128	54.622
4	1.302	4.070	58.092
5	1.209	3.779	51.871
6	1.113	3.479	65.350
7	1.013	3.166	68.516
8	0.952	2.976	71.491

Principal Components Analysis of the 32-item instrument was computed in order to identify the number of factors present. Seven factors emerged having Eigen values that exceeded 1.00, as illustrated in Table 4.10. This initial analysis would appear to

partially support the notion of separate, discrete categories of behaviour as suggested by Garbarino et al's. (1986). However, although these accounted for 71.49% of the response variance, one of these factors was much more clearly defined than the others. This had an Eigen value of 14.16 and alone accounted for 44.26% of the variance (see Table 4.10).

Table 4.11 *Principal Components Analysis: Component Matrix of Items Loading 0.4 and Above*

Item	Component						
	1	2	3	4	5	6	7
1	0.433				0.439		
2	0.685						
3	0.766						
4	0.811						
5	0.716						
6	0.771						
7	0.530					0.429	
8	0.768						
9	0.850						
10	0.769						
11	0.659						
12	0.621	0.516					
13	0.412			0.450			
14	0.707						
15	0.657						
16	0.762						
17	0.461					0.420	
18	0.401	0.535					
19	0.602						
20	0.622						
21	0.674						
22	0.744						
23	0.678						
24	0.720						
25	0.694						
26				0.662			
27	0.635						
28				0.516			
29	0.808						0.453
30	0.804						
31	0.620						
32	0.724						

Table 4.11 illustrates factor analysis using varimax rotations. This revealed that 30 of the 32 items positively loaded onto one component. An item was considered to load onto a factor if it had a weight of 0.4 or above in accordance with accepted practice (Ford, MacCallum, & Tait, 1986). This revealed that all items had a loading of 0.4 and above, which indicates the statistical strength of the instrument. However, this analysis also identified a number of items that cross-loaded with more than one component; these were items; 1, 7, 12, 13, 17, 18. These items, however, were not grouped together to constitute a single component, but were spread across five components. These items were, therefore, omitted from any further analysis because they comprise the coherence of the single factor.

There were also three items; 26, 28 and 29 which loaded separately onto different components. However, as single items these did not constitute a factor, and so were also omitted from any further analysis. In total, nine items were eliminated. Following these analyses, 23 items were retained, all of which contributed to a single factor. The modified 23-item SER-Q's internal consistency was determined using Cronbach (1955) alpha value, yielding a value of 0.95.

Cronbach split-half analysis was also undertaken to verify its internal consistency. This resulted in a Cronbach Split half coefficient of 0.93 for part one, and 0.89 for part two, which strengthens the internal consistency of the SER-Q as these values are extremely high. Where items: 2,3,4,5,6,8,9,10,11,12,13,14 contributed to the first

half, and items 15,16,19,20,21,22,23,24,25,27,30,31,32 contributed to the second half.

Table 4.12 *Summary of changes to SER-Q following Principle Components Analysis*

Item	Coach behaviour statement	Included/ Removed	New Item Number
1	My coach criticised my weight/body shape	Removed	/
2	My coach criticised my personality	Included	1
3	My coach told me I was stupid	Included	2
4	My coach said I was useless	Included	3
5	My coach put me down in front of others	Included	4
6	My coach told me they were embarrassed by me	Included	5
7	My coach always managed to find my faults	Removed	/
8	My coach made me feel small	Included	6
9	My coach made nasty personal comments about me	Included	7
10	My coach talked to me with no respect	Included	8
11	My coach verbally attacked me by shouting at me	Included	9
12	My coach talked to me aggressively	Removed	/
13	My coach walked away from me in training	Removed	/
14	My coach walked away from me in training	Included	10
15	My coach rejected me because I couldn't do a skill	Included	11
16	My coach made me feel I was worthless	Included	12
17	My coach threatened to physically harm me	Removed	/
18	My coach threatened to pull me from the next competition	Removed	/
19	My coach said he/she could ruin my career	Included	13
20	My coach said they'd make training harder for me	Included	14
21	My coach said mistakes were always my fault	Included	15
22	My coach said bad training sessions were my fault	Included	16
23	My coach blamed my team-mates failures on my performance	Included	17
24	My coach blamed me for other people's mistakes	Included	18
25	My coach treated me differently to others	Included	19
26	My coach sent me away home during training	Removed	/
27	My coach made me train on my own	Included	20
28	My coach sent me out of training for a period of time	Removed	/
29	My coach ignored me	Removed	/
30	My coach walked away from me after a bad performance	Included	21
31	My coach ignored me if I was injured	Included	22
32	My coach didn't acknowledge me in training.	Included	23

(*note the new items numbers will be used in subsequent studies)

This demonstrated that these 23 items comprised a single, unitary construct, and that the SER-Q is a potentially powerful instrument with which to investigate the frequency athletes reported experiencing the negative behaviours by coaches when they were child athletes, and their emotional responses to them.

Predictive Validity

The second phase of the study focused on the analysis of the 23-item SER-Q using the second scale as a means of establishing the predictive validity of the SER-Q. This was achieved through an analysis of the emotional response, in relation to the frequency scale. It consisted of an item by item analysis of the emotional impact responses of respondents to each statement of coach behaviour. The analysis focused on the changes in the emotional response as the reported frequency of the behaviour increased. In order to establish if there were any relationships between the two scales; frequency and emotional response, a Pearson Product Moment Correlation of frequency with emotional response was undertaken for each of the 23 items on the SER-Q. The theoretical model proposed in Study One predicts that as the exposure to negative coach behaviour increases so will there be an increase in the reported negative emotional response. Thus in order to demonstrate predictive validity the instrument should be able to elicit results that fit this model.

Table 4.13 Mean Emotional Impact Responses to Coach Behaviour

Mean Emotional Response					
1 = very negative emotional impact, 4 = no emotional impact and 7 = very positive emotional impact					
Frequency	1 (Never)	2 (Rarely)	3 (Sometimes)	4 (Very Often)	5 (Always)
Items					
1	3.99	2.89	2.99	2.20	2.00
2	4.00	3.00	3.20	2.14	1.00
3	3.99	3.37	2.87	2.16	1.00
4	4.00	2.94	2.71	2.40	1.14
5	3.99	3.20	2.90	3.00	1.00
6	3.99	2.89	2.42	2.12	1.25
7	3.99	3.03	3.14	2.12	2.00
8	3.97	3.04	2.62	2.05	2.14
9	3.99	3.00	3.25	2.66	2.13
10	4.00	3.14	2.55	2.07	No data
11	4.00	3.28	2.37	3.00	2.00
12	3.99	2.70	3.06	2.33	1.28
13	3.99	3.00	2.75	2.50	3.00
14	4.00	3.38	3.70	3.25	4.92
15	3.99	3.04	2.94	3.66	2.28
16	3.99	2.92	2.91	3.00	2.20
17	3.99	3.13	2.60	2.00	1.33
18	3.99	3.24	2.77	2.00	1.50
19	4.00	3.23	3.14	2.71	1.60
20	4.00	3.07	2.50	2.00	No data
21	4.00	3.12	2.95	2.10	1.42
22	3.99	2.85	2.66	2.00	2.00
23	3.98	2.87	2.86	2.18	3.33
<i>Total Mean</i>	<i>3.99</i>	<i>3.18</i>	<i>3.08</i>	<i>2.74</i>	<i>2.30</i>

Table 4.13 identifies the mean emotional response in relation to the reported frequency of each statement of coach behaviour. For 22 items, respondents reported an increase in their mean negative emotional response as the mean frequency of each reported behaviour increased. However, item 14: 'My coach said they'd make training harder for me', did not follow this pattern. For this item, when the

behaviour was reported as occurring 'always' it had a mean response over 4, indicating that it was either perceived positively or had no emotional impact. This strongly suggests that this particular coach behaviour was either not perceived as abusive by the athletes, or elicited no negative emotional response.

The correlations shown in Table 4.14 indicate that all but one of the items, item 14, have a significant negative relationship between the reported frequency and the emotional response, such that as the frequency increases so the negative emotional response is also increased (see Table 4.13). This was true for all items except for item 14 'my coach said they would make training harder for me' ($r=0.095$). This further supports the finding detailed in Table 4.14 that athletes responded to item 14 positively and as such it cannot be considered to be emotionally abusive behaviour within a sports context. Therefore this item was removed, leaving a 22-item instrument.

Table 4.14 *Pearson Correlation Coefficients for each Item; Correlating Frequency of Coach Behaviour with Emotional Response on the 23-item SER-Q*

Item	R	% Variance (r^2)
1	-0.697 *	48.50
2	-0.718 *	51.55
3	-0.765 *	58.52
4	-0.639 *	40.08
5	-0.774 *	59.90
6	-0.776 *	60.21
7	-0.687 *	47.19
8	-0.703 *	49.42
9	-0.546 *	29.81
10	-0.798 *	63.68
11	-0.655 *	42.90
12	-0.611 *	37.33
13	-0.620 *	38.44
14	-0.095	9.02
15	-0.564 *	31.80
16	-0.620 *	38.44
17	-0.747 *	55.80
18	-0.774 *	59.90
19	-0.567 *	32.14
20	-0.836 *	69.88
21	-0.765 *	58.22
22	-0.822 *	67.56
23	-0.610 *	37.21

* denotes significance where $p < 0.001$

In the light of the findings above the SER-Q needs to be modified to ensure that it meets all of the validity requirements. Table 4.15 illustrates the final version of the SER-Q which demonstrated a Cronbach (1955) alpha value 0.954 indicating excellent internal reliability.

Table 4.15 *Summary of changes to SER-Q showing retained items*

Item	Coach behaviour statement	Included/ Removed	New Item Number
1	My coach criticised my personality	Included	1
2	My coach told me I was stupid	Included	2
3	My coach said I was useless	Included	3
4	My coach put me down in front of others	Included	4
5	My coach told me they were embarrassed by me	Included	5
6	My coach made me feel small	Included	6
7	My coach made nasty personal comments about me	Included	7
8	My coach talked to me with no respect	Included	8
9	My coach verbally attacked me by shouting at me	Included	9
10	My coach walked away from me in training	Included	10
11	My coach rejected me because I couldn't do a skill	Included	11
12	My coach made me feel I was worthless	Included	12
13	My coach said he/she could ruin my career	Included	13
14	My coach said they'd make training harder for me	Removed	/
15	My coach said mistakes were always my fault	Included	14
16	My coach said bad training sessions were my fault	Included	15
17	My coach blamed my team-mates failures on my performance	Included	16
18	My coach blamed me for other people's mistakes	Included	17
19	My coach treated me differently to others	Included	18
20	My coach made me train on my own	Included	19
21	My coach walked away from me after a bad performance	Included	20
22	My coach ignored me if I was injured	Included	21
23	My coach didn't acknowledge me in training.	Included	22

(*note the new items numbers will be used in subsequent studies, see Appendix B)

Discriminant Validity

The final analysis focused on the ability of the SER-Q to be able to discriminate between different populations. Table 4.16 indicates that the majority of athletes never experience any of the emotional abusive behaviours. Thus this data contributes to the understanding of prevalence of athletes who have reported experiencing emotionally abusive behaviour from their coach which has resulted in a negative emotional response. Furthermore, these findings indicate that the SER-Q is able to

discriminate between athletes who have and have not reported experiencing emotional abuse, and as such contributes greatly to the strength and usefulness of the instrument.

The athletes who answered 'never' having experienced any of the emotionally abusive behaviours act as an internal control for the SER-Q. If one examines the mean emotional response it emerges that they respond with 4.0 indicating that there is no emotional response. This is what one would expect if a specific behaviour had never been experienced there would be no emotional response to it. Consequently this strengthens the internal validity of the SER-Q as it supports the predicted pattern of responses outlined in the theoretical model (see Study One).

The table 4.17 describes the percentage distribution of total responses across the frequency categories these were calculated in the following way: The percentage of responses above 1 and below 2 were identified which translates into the category range Never-Rarely; responses above 2 and below 3 translated into the category range Rarely-Sometimes; responses above 3 and below 4 translated into Sometimes-Very Often whilst percentage responses above 4 and 5 and below translated into Very Often-Always. The table below summarises the total percentages in each frequency category range. The table below summarises the total percentages in each frequency category range. It illustrates very clearly that the vast majority of athletes reported 'never-rarely' having experienced negatives coaching behaviours when they were child athletes.

Table 4.16 *Responses in each Frequency Category to each Coach Behaviour Item*

Number of responses in each frequency					
Frequency	1 (Never)	2 (Rarely)	3 (Sometimes)	4 (Very Often)	5 (Always)
Items					
1	132	55	22	15	5
2	189	17	14	7	2
3	206	8	8	6	1
4	100	74	38	10	7
5	201	10	11	4	3
6	140	48	21	16	4
7	175	26	14	8	6
8	147	41	16	18	7
9	109	46	35	24	15
10	170	28	18	13	0
11	189	08	8	3	1
12	183	19	16	3	8
13	204	13	4	4	4
14	159	41	19	3	7
15	183	26	12	3	5
16	175	38	8	5	3
17	189	25	9	2	4
18	162	34	21	7	5
19	207	14	6	2	0
20	158	33	21	10	7
21	183	27	9	6	4
22	176	24	15	11	3

Table 4.17 *Total Percentages of Responses to Frequency Category Range*

Never - Rarely	Rarely - Sometimes	Sometimes – Very Often	Very Often - Always
86.5%	7.8%	3.5%	2.2%

Summary of the reliability and validity analysis of the SER-Q

Following all the analysis these key factors emerged.

- Internal reliability (homogeneity) was demonstrated with an excellent Cronbach (1955) alpha value 0.954 for the final 22-item questionnaire.
- Split-half analysis revealed excellent homogeneity
- Principal component analysis revealed a one factor structure containing 23-items
- Analysis of the mean emotional impact responses to coach behaviour; and the correlations of frequency of coach behaviour with emotional response identified that item 14 (original item 20) did not follow the predicted pattern of response. Therefore this item also needed to be removed leaving a 22-item instrument.
- Predictive validity was demonstrated
- Discriminate validity was demonstrated

Discussion

The study aimed to develop an instrument to assess the emotional response of athletes to their coaches' reported negative behaviour, using a technique of retrospective self reporting. The goal of the instrument can thus be described as the measurement of the athlete's present subjective perception of the degree of trauma present in his/her childhood sporting experiences. The results show that the SER-Q is a valid and reliable instrument which measures a single, unified construct of emotional abuse within the context of coaching child athletes. Nevertheless, the analysis points strongly toward a unitary construct, with all the behaviours being related and associated. Internal reliability was demonstrated as being extremely good ($\alpha=0.956$), thus one can say with confidence that the items generated for the SER-Q are homogenous, and are highly relevant to the domain of emotional abuse within a sports context.

The results therefore, did not support the notion of eight distinct behaviour-categories of abuse, therefore challenging previous work (Garbarino et al's., 1986; Gervis & Dunn, 2004) based on the eight-element model. It should be remembered however that the hypothesis regarding the existence of eight discrete behaviours categories was developed from the observation of adult behaviour toward children (Garbarino et al's., 1986), rather than from the child's perceptions of them and

emotional response to them; nor had they had not been psychometrically measured. The current results provide more evidence to support the broader operational definition proposed by Garbarino et al's., (1986) of psychological maltreatment, but not its sub division into eight discrete categories. However, these behaviours are still important as 'identifiers' of adult behaviour towards children which constitute emotional abuse, and as such are of enormous value.

Predictive validity of the instrument was demonstrated, and concurs with the theoretical model (see Study One) which proposed that there is a link between the frequency of experiencing the negative coach behaviour, and the emotional response to it. For all items there was a significant negative correlation ($p < 0.001$), which indicated a strong predicative relationship between these two variables as anticipated by the theoretical model. This supports O'Hagan's work (1993) that negative emotional response to negative behaviour was associated with the frequency with which it occurs.

In further support of O'Hagan's (1993) research this study showed that, when a behaviour was not reported, not surprisingly, no emotional response was reported either, but as the frequency increased so the athletes reported an increase in their negative emotional response. It is therefore a strength of the instrument that it measures both the frequency and emotional response of athletes, to reported coaching behaviours.

Discriminant validity was also demonstrated through the analysis which identified two dichotomous populations; athletes reporting experience of coach maltreatment and those who did not. Thus the instrument meets recommendations made by Herronkhol, (2005) when he commented that instruments attempting to measure abuse should be 'able to differentiate with some degree of validity children who have experienced that sub-type from children who have not' (p. 422). Analysis of the SER-Q has demonstrated its ability to do this. Athletes who had never reported experiencing any of the negative coach behaviours differed in their emotional response from those who did, in that their emotional response was reported as a neutral one (see Table 4. 13). Moreover, this finding was in broad agreement with May-Chahal and Cawson (2005) who identified that in the United Kingdom 90% of their respondents reported experiencing no form of child maltreatment from their parents. From their study 6% of respondents reported having experienced parental emotional abuse. This is also comparable to the number of athletes who reported as child athletes having 'very often' and 'always' (8.7%) experienced coaching behaviours that could be described as emotionally abusive. Thus, emotional abuse within a sport context is a minority experience, however for those child athletes who experience it the consequences may be severe and long lasting as it is for children who experience emotional abuse in other contexts.

Summary of results

When athletes were asked to retrospectively look back at their childhood experiences of coach's behaviour and their emotional responses to them the SER-Q measured those experiences and documented the following:

1. The majority of athletes (91.3%) report no emotionally abusive behaviour from their coaches, when they (the athletes) were children.
2. The minority of athletes who did report emotionally abusive from their coaches also report a negative emotional response to these behaviours. Note: the majority who reported no such emotionally abusive behaviour, reported no negative emotional responses.
3. When the responses of those athletes reporting experiencing emotionally abusive behaviour from their coaches and their own emotional response to it, were considered in more detail it could be seen that the strength of the negative emotional response increase with the frequency of the reported abusive behaviour. As those who reported no emotionally abusive behaviour reported no negative emotional response it must be concluded that the reported abuse was causal. (i.e., there is no other reasonable explanation other than it was the reported abuse that caused the negative emotional response, and it was the repetition of that emotionally abusive coach behaviour that led to the strengthening of the negative emotional response.)

These findings (1-3 above):

- a) Are consistent with the literature (Garbarino et al's., 1986; O'Hagan, 1995) which underpins the theoretical model.
- b) Are consistent with the findings of Study One that showed that when athletes report experiencing emotionally abusive behaviour by their coaches when they were child athletes, they always report a negative emotional response to it.
- c) Any emotionally abusive behaviour towards their child athletes always has negative emotional consequences, and these can last many years.

Implications for the model

The theoretical model proposed in Study One identified eight distinct emotionally abusive coach behaviours. However, in the light of the findings from this study it has emerged that these behaviours are not discrete and cannot be measured separately. On the other hand the study did identify that the SER-Q measured the *unified* construct of emotionally abusive coach behaviour. Therefore, the model needs to be revised to take this into account. Thus the model presented symbolizes this new development (see Figure 4.1).

The SER-Q tests the athlete's retrospective childhood perceptions of their coach behaviour and their emotional response to it, namely the first elements of the model. It does not directly measure any emotional problem symptoms, such as diminished self-worth or depression that may arise from their experiences. However, the findings from Study One strongly indicated that a negative emotional response is the

precursor to an athlete describing emotional problems such as depression or diminished self-worth. Therefore the model must reflect this important aspect even though the SER-Q does not directly measure it.

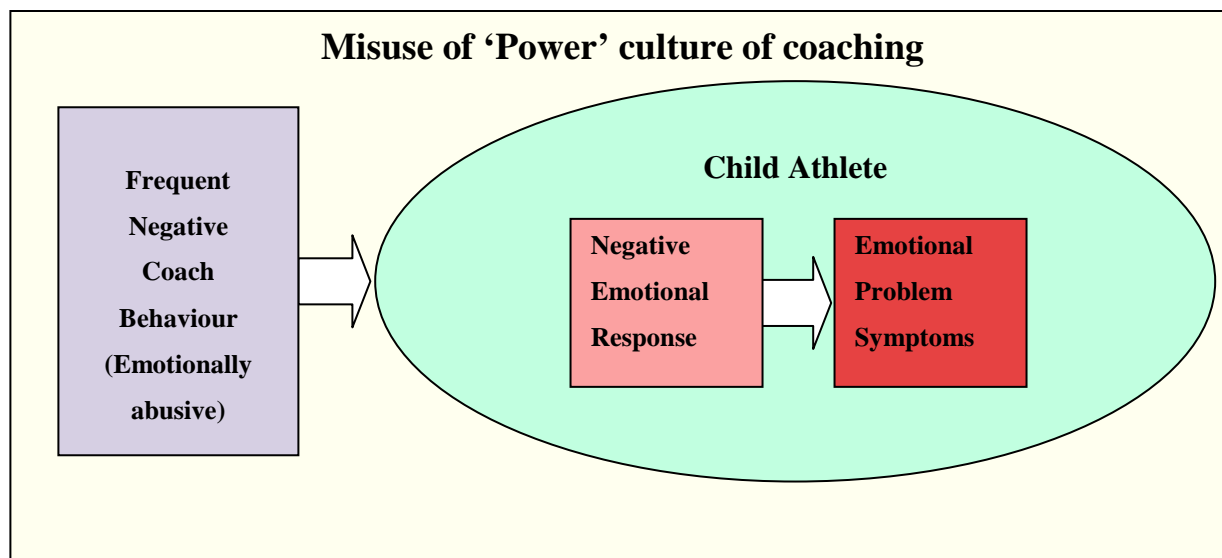


Figure 4.1 Theoretical Model 2 of the Process of Negative Emotional Response in Child Athletes

The aims of this study were to:

- create a retrospective self-report instrument that was valid and reliable and is suitable for use with large populations;
- utilise the theoretical construct of emotional abuse as described by Garbarino et al's., but anchored within a sports context
- test the theoretical model proposed in Study One

Overall the aims of the study have been achieved, with the findings from the analysis of the SER-Q providing strong support for it being a valid and reliable instrument that could contribute to develop the understanding athlete experiences and emotional response to them with a larger population.

Emergent Questions

The findings however cannot be generalised beyond the study sample unless they can be replicated with an entirely separate sample drawn from a similar population but independently, at a different time. This therefore will be the purpose of the next study.

Chapter Five

Study Three: A Confirmatory Study

Introduction

The development of a sound knowledge base in an area where currently hardly any exists is an important process to undertake. By understanding the principle that; knowledge will ‘accumulate incrementally through studies that build on each other’ (Roberts, 2004 p.44), the use of replication or confirmatory studies is an important part of the procedure in order to add strength and clarity to previous findings. Therefore, in order to test the strength of the theoretical model, it is essential to verify and reinforce, or contradict the findings from the earlier findings that emanated from both Study One and Study Two in order to test the strength of the theoretical model.

There are a number of reasons for replication research which include; ‘correcting perceived shortcomings in the original study, investigating the generality of previous results, and resolving inconsistencies of previous results with later results or theories’ (Reese, 1999 p.1). The purpose of this study is to investigate further the assumptions made from Study Two; that the theoretical model holds true and the SER-Q as a means of measuring it can be tested and verified. Therefore, this study is

designed to test the original propositions which underpin in the theoretical model. In this case, it is the theoretical meanings embedded in the original findings from Study Two that need to be replicated and confirmed. Therefore, this study is a conceptual replication of Study Two, the difference being that a new population is used.

Aims of the Study

1. To test the 22-item SER-Q on a different population to determine if the proposed theoretical model (see Study Two) can be supported.
2. The theoretical model predicts that as the frequency of reported exposure to emotionally abusive behaviour increases so the reported negative emotional response will also increase.
3. If the SER-Q is to be considered as a valid and reliable tool it must also be able to discriminate between athletes who report having experienced emotional abusive coach behaviour and those who do not report it.

It is important to assess whether or not the theoretical model can be confirmed when analysing the data in this manner.

Thus, the following must be considered:

1. If athletes retrospectively report experiencing emotionally abusive behaviour from their coaches when they were child athletes, do they also report a negative emotional response to these behaviours, as they do in Study Two?
2. Does the strength of the negative emotional response increase in relation to the reported frequency of emotionally abusive coach behaviour, as is reflected in Study Two?

3. What percentage (i.e. prevalence) of athletes report experiencing, as child athletes, emotionally abusive behaviour from their coaches, and is this similar to that in Study Two?

Method

Participants

As for Study Two, the participants were 314 student athletes (205 male and 109 female) from 35 sports who were enrolled in a university undergraduate Sport Science degree programme in the UK. This undergraduate programme was chosen as it has the highest concentration of athletes within the University. These student athletes were from 35 different sports. They had competed at the following levels – recreational = 12 (3.8%); club level = 52 (16.6%); regional level = 132 (42.0%), national level = 72 (22.9%), international level = 46 (14.6%). Elite athletes were defined as those who were competing at the National and International levels. The percentage of the sample population in each age category was as follows; 18-21yrs (87%); 22-25yrs (9.9%); 26-30yrs (1.3%); 31yrs and over (1.6%). The percentage of the population in each participation-duration category, which described the overall length of time competing in their sport, was as follows; 2-5yrs (22.9%); 6-10 yrs (40.1%); 11-15 yrs (28.7%); and 16 yrs or more (8%). The athletes were coached by men (80.6%) and women (19.4%).

Procedures

The study was carried out in accordance with the procedures outlined in Study Two. This is important as; ‘the original research method should be replicated as closely as possible to ensure that failure to replicate the previous results does not reflect the use of different methods’ (Reese, 1999, p.1). Procedures were carried out in line with the University Research Ethics Guidelines. Participants were volunteers recruited from a number of undergraduate sport science classes and participant consent was obtained. Participants were given only one questionnaire which was completed anonymously. The investigator read the instructions on how to complete the questionnaire to the participants. Participants were instructed to complete the questionnaire based on coaching behaviour that they had experienced when they were competing at their highest level as a child athlete (i.e., under age 18). From the initial 316 questionnaires distributed, 2 were not completed fully and so were discarded, leaving 314 for analysis.

Instruments

The 22-item SER-Q (see Study Two, and Appendix B)

Data Analysis

The data analysis for this study focused on replicating the findings of Study Two such that the predictive validity and discriminate validity of the SER-Q could be established with a new independent population. The initial analysis sought to test the

reported emotional impact as a function of frequency of coach behaviour on an item by item basis as in Study Two, thus addressing the first aim of the study (see Table 5.1).

Pearson Product Moment correlations were used to investigate the first and second aim, namely testing for significance of the relationship between reported frequencies of coach behaviour and reported emotional response; also on an item by item basis (see Table 5.1).

Lastly, an analysis of the distribution of reported frequencies of coach behaviour by athletes when they were child athletes was undertaken to see if this replicated the findings of Study Two (see Table 5.2 and 5.3).

Results

To address the first and second aim an item by item analysis of the emotional responses of respondents to each behaviour their coach enacted. The analysis focused on the changes in the emotional response as the reported frequency of the behaviour increased.

Table 5.1 *Mean Emotional Impact Responses to Coach Behaviour*

Mean Emotional Response					
1 = very negative emotional impact, 4 = no emotional impact and 7 = very positive emotional impact					
Frequency	1 <i>(Never)</i>	2 <i>(Rarely)</i>	3 <i>(Sometimes)</i>	4 <i>(Very Often)</i>	5 <i>(Always)</i>
<i>Items</i>					
1	3.99	2.98	3.00	3.33	1.66
2	3.96	3.20	2.81	2.57	2.5
3	3.94	3.50	3.05	2.33	1.00
4	3.97	2.92	2.68	2.16	2.00
5	3.99	3.22	3.06	2.00	1.00
6	3.92	2.91	2.27	2.63	2.25
7	3.91	2.93	3.00	2.00	1.00
8	3.98	3.14	2.63	1.73	1.33
9	3.96	3.17	2.76	2.33	1.00
10	3.95	3.17	2.76	2.33	1.00
11	3.98	3.22	2.60	2.70	No data
12	3.96	2.89	2.70	3.00	2.20
13	3.99	3.46	3.00	2.66	1.33
14	3.93	3.17	2.86	2.57	1.33
15	3.92	3.27	3.40	2.71	2.50
16	3.96	3.18	3.46	2.66	No data
17	3.94	3.26	3.00	3.40	1.00
18	3.94	3.63	3.54	2.50	1.60
19	3.93	3.54	3.09	3.00	1.50
20	3.95	3.15	3.59	2.14	1.00
21	3.97	3.18	2.77	1.62	2.00
22	3.95	3.04	2.77	2.30	1.00
<i>Total Mean</i>	3.95	3.18	2.94	2.47	1.51

Table 5.1 identifies the mean emotional response in relation to the reported frequency of each statement of reported coach behaviour. These results indicate that the predicted pattern of responses has been repeated from Study Two. For all 22 items, there was a reported increase in the frequency of each reported behaviour which was matched by an increase in the reported negative emotional response. This pattern was repeated when the total mean responses were considered. These findings

indicate that the strength of the negative emotional response increases in relation to the reported frequency, as it did in Study Two.

Additionally, the athletes who answered 'never' having experienced any of the emotionally abusive behaviours act as an internal control for the SER-Q. Thus, the SER-Q is able to discriminate between those athletes who have and have not experienced emotionally abusive behaviour by the emotional response reported. Where athletes report never having experienced emotional abusive behaviour from their coach their reported emotional response is as expected, nearly 4.0 (3.95), indicating that there is no emotional response. This is what would be expected; if a behaviour had never been experienced there would be no emotional response to it. This finding reinforces the findings of Study Two and, as such, strengthens both the discriminate validity and predictive validity of the SER-Q.

In order to establish if there were any relationships between the two scales: frequency and emotional response, a Pearson Product Moment Correlation of frequency with emotional response was undertaken.

The correlations shown in Table 5.2 indicate that all items have a significant negative relationship between the reported frequency and the emotional response, such that as the frequency increases so the negative emotional response is also increased.

Table 5.2 *Pearson Correlation Coefficients for each Item; Correlating Frequency of Coach Behaviour with Emotional Response on the 22-item SER-Q*

Item	r	% Variance (r^2)
1	-0.535 *	28.62
2	-0.556 *	30.91
3	-0.473 *	22.37
4	-0.555 *	30.80
5	-0.357 *	13.49
6	-.0580 **	33.64
7	-0.486 *	23.61
8	-.0701 **	49.14
9	-0.571 *	32.60
10	-.0630 **	39.69
11	-0.610 **	37.21
12	-0.525 *	27.56
13	-0.435 *	18.92
14	-.0584 **	34.10
15	-0.430 *	18.49
16	-0.420 *	17.64
17	-0.413 *	17.05
18	-0.383 *	14.66
19	-0.423 *	17.89
20	-0.473 *	22.37
21	-.0598 **	35.76
22	-0.608 **	36.96

* denotes significance at $p < 0.01$

** denotes significance at $p < 0.001$

The correlations are in the same directions as those reported in Study Two (see Table 4.1) and the results are all statistically significant. These results indicate that, on an item by item basis, when there was a reported increase in the frequency of the reported emotionally abusive behaviour there was an increase in the negative emotional response to it. These findings are all in accord with Study Two, and strengthen the predictive validity of the SER-Q in line with the proposed theoretical model.

Table 5.3 Responses in each Frequency Category to each Coach Behaviour Item

Number of responses in each frequency category					
Frequency	1 (Never)	2 (Rarely)	3 (Sometimes)	4 (Very Often)	5 (Always)
Items					
1	192	68	36	15	3
2	254	35	16	7	2
3	272	20	17	3	1
4	140	109	54	6	5
5	273	22	16	3	1
6	268	62	16	11	4
7	261	22	16	3	1
8	219	55	22	15	3
9	156	68	54	27	9
10	244	46	13	9	2
11	253	45	11	4	0
12	245	37	23	4	5
13	286	13	9	3	3
14	224	58	22	7	3
15	254	36	15	7	2
16	252	43	13	6	0
17	262	34	12	5	1
18	190	63	44	12	5
19	248	32	22	9	2
20	230	53	22	7	2
21	248	37	18	8	3
22	240	43	18	10	3

Table 5.3 indicates that the vast majority of athletes never experience any of the emotional abusive behaviours. The athletes who answered ‘never’ having experienced any of the emotionally abusive behaviours act as an internal control for the SER-Q. Thus this data contributes to the understanding of prevalence of athletes who have reported experiencing emotionally abusive behaviour from their coach which has resulted in a negative emotional response. Furthermore, these findings indicate that the SER-Q is able to discriminate between athletes who have and have

not reported experiencing emotional abuse, and as such contributes greatly to the strength and usefulness of the instrument.

Table 5.4 describes the percentage distribution of total responses across the frequency categories. These were calculated in the following way: The percentage of responses above 1 and below 2, were identified which translates into the category range; Never-Rarely. Responses above 2 and below 3 translated into the category range Rarely-Sometimes. Responses above 3 and below 4 translated into Sometimes-Very Often, while percentage responses above 4 and up to 5 translated into Very Often-Always. Table 5.4 below summarises the total percentages in each frequency category range. Table 5.4 indicates that the majority of athletes report 'never' experiencing any of the emotional abusive behaviours from their coaches. These results are very similar to those of Study Two, demonstrating that there was a very small percentage of athletes that reported experiencing negative coach behaviour when they were child athletes. This highlights the similarities between the two sample populations.

Table 5.4 Total Percentages of Responses to Frequency Category Range

Never - Rarely	Rarely - Sometimes	Sometimes – Very Often	Very Often – Always
86.0%	7.7%	4.4%	1.9%

These findings indicate that the majority of athletes reported never/rarely experiencing emotionally abusive behaviour from their coaches. This finding is very similar to that reported in Study Two, (see Table 22, Study Two) where the percentages of responses to each frequency category were: Never-Rarely 86.0%, Rarely-Sometimes 7.7%, Sometimes-Very often 4.4% and Very often-Always 1.9%. These findings give strong support for the notion that, whilst these were two distinct sample populations drawn two years apart, they may be considered as samples from the same population.

Discussion

This study aimed to re-analyse the SER-Q with a new and independent population. This was completed as a means of ensuring that the SER-Q is a robust instrument which can be used with different populations of athletes. This was demonstrated through the item by item analysis, which supported the findings in Study Two.

The first and second aim of this study was to further explore the link between reported frequency of emotionally abusive coach behaviour and emotional response. With respect to these aims; the results showed that when athletes reported experiencing emotionally abusive behaviour from their coaches when they were child athletes, they also reported a negative emotional response to these behaviours.

These findings were identical to Study Two. Moreover, athletes who reported experiencing emotionally abusive behaviour always reported a negative emotional response to it. These findings provide further support for the theoretical model which proposes that, for child athletes who experience emotionally abusive behaviour from their coach, there will always be a negative emotional consequence.

The third aim of the study focused on the relationship between reported emotional response and reported frequency. This study found that the strength of the negative emotional response increased significantly in relation to the reported frequency for each item of the SER-Q. This implies a very strong relationship between the frequency of the coach behaviour and the emotional response to it. This is an

important aspect as these findings replicate those from Study Two. These findings indicate that where a child athlete has reported experiencing trauma, in this instance from their coaches' behaviour, there will be a residual emotional response which can be measured even when the trauma itself cannot be directly observed (Bingelli et al., 2001).

Moreover, in relation to the theoretical model this evidence further confirms the model. The theoretical underpinnings for the model provided by Garbarino et al's. (1986) and O'Hagan (1993) have been shown to be robust and measurable utilising a psychometric instrument. Whilst it is acknowledged that the SER-Q is only applicable within a sports context, it does demonstrate that emotional abuse can be investigated through psychometric analysis.

Lastly, this study sought to determine the prevalence of reported coach abuse, by identifying the percentage of athletes who reported that they experienced, as child athletes, emotionally abusive behaviour from their coaches in comparison to reported negative coach behaviour in Study Two.

The results indicated that the majority of athletes (86%) reported no abusive behaviour from their coaches when they were children, whilst only 1.9% reported experiencing it all the time. This finding is directly comparable to both the findings of Study Two. This further mirrored Chahal and Cawson (2005) who identified 90% of their respondents as reporting that they never had experienced child maltreatment

from parents. Thus, it is apparent that what occurs in family settings as a whole also is mirrored in sport. These findings suggest that the SER-Q has potential to be used to explore the prevalence of emotional abuse in sport on a larger scale, as means of assessing how widespread the problem may be in a sport context, in a similar way to other retrospective prevalence measures that have been used to investigate other aspects of child maltreatment (Creighton, 2004).

The results of this study provide more evidence to support the theoretical model, which maintains that the more frequently an athlete reports experiencing negative coach behaviour the more they report an increase in their negative emotional response to it.

Having completed this analysis on a new independent population it can be said with confidence that the SER-Q does test the proposed theoretical model and measures the unified construct of emotional maltreatment (Garbarino et al's., 1986) within a sport context. Furthermore, the implications for the theoretical model following this study are that it is robust, and that data from an independent sample conform to all the principles inherent in it.

Summary of findings

1. Findings from this study confirm findings from Study Two
2. Athletes who retrospectively report frequently experiencing negative coach behaviour as child athletes always report a negative emotional response to it.

3. There is a strong negative relationship between frequency and emotional response
4. Prevalence of retrospective reporting of emotionally abusive behaviour by their coaches mirrors rates of emotional abuse reported in the UK.

Implications for the model

The findings from this study support the theoretical model that emerged from Study One and Two. Consequently the structure of the model remains unaltered, but is further confirmed with a new set of data and results.

Emergent Questions

In contrast to Study One, which focused solely on reporting on the childhood experiences of elite athletes, this current study did not explore the experiences of athletes in relation to the level at which they were competing, gender of athlete, type of sport (either team or individual) and gender of coach. Consequently there is a need to explore these questions utilising the SER-Q to see if these factors have an impact on their reported childhood experiences. Study Two and Three have established the validity and reliability of the SER-Q as a sport-specific measure of an athlete's retrospective and perceived childhood experiences of being coached and their emotional responses to it. It is now pertinent to consider if different populations of athletes retrospectively report different experiences. Key questions that emerge are:

1. Does the level at which a child athlete competes influence their responses on the SER-Q?
2. Do males and females respond the same on the SER-Q?
3. Does the gender of the coach influence responses on the SER-Q?
4. Does the type of sport either team or individual have an effect on responses on the SER-Q?

Pooling the data from Study Two and Study Three

These questions are considered in Study Four. However, in order to be able to consider all these questions effectively each cell size for each variable data set must be examined. In a number of instances the data from either this study or study two would be too small to draw any meaningful conclusions. For example the sample size of recreational athletes from Study Two was only 3. Thus there is a strong case for considering pooling the data from study two and three to create a larger sample population on which to conduct the analyses that will address the emergent questions. In order to do this careful attention needs to be paid to the demographic similarities of the two populations to ensure that they are homogeneous in their makeup. These are shown in Table 5.5.

Given that the two samples were drawn from a population of university student athletes, from the same university it is not surprising that they are demographically very similar, as shown in Table 5.5.

Table 5.5 *Descriptive Statistics Comparing Demographic Factors from Study Two and Study Three*

Demographic Factor		Study Two		Study Three	
		N	%	n	%
Athlete Gender	Female	81	35.4	109	34.7
	Male	148	64.6	205	65.3
Competitive level	Recreational	3	1.3	12	3.8
	Club	26	11.4	52	16.9
	Regional	95	41.5	132	42.0
	National	60	26.2	72	14.3
	International	45	19.7	46	14.3
Age	18 – 21 yrs	191	83.4	274	87.2
	22 – 25 yrs	28	12.2	31	9.9
	26 – 30 yrs	4	1.7	4	1.3
	Over 31 yrs	6	2.6	5	1.6
Coach Gender	Male	183	79.9	253	80.6
	Female	46	20.1	61	19.4

Furthermore, the two populations also demonstrated similarity in their responses on the SER-Q. Therefore, taking these two factors into consideration, it would be appropriate to pool the data from Study Two and Study Three in future studies creating a new combined population where $n=543$.

Chapter Six

Study Four: Using the SER-Q

Introduction

Research into emotional abuse within a sports context is a new area, and so there is a paucity of data to guide new research. However, there is some useful research in the general area of child maltreatment which might provide some guidance.

Competitive level

The majority of research cited (Brackenridge, 1997; Coakley, 1992; Cushion & Jones, 2006; Stirling & Kerr, 2008), has focused on the experiences of ‘elite’ athletes. Although none of the research, with the exception of Stirling and Kerr, specifically explored the issue of emotional abuse, they all identified facets of behaviour from coaches that could be described as emotionally abusive and reported athlete experiences which were indicative of negative emotional responses to their coaches behaviour. However, there has not been any research to date which has specifically tried to compare the experiences of child athletes competing at different levels to see if these reported experiences were different.

Gender of athlete

Within the context of child maltreatment the issue of gender and emotional abuse has been identified. The largest prevalence study that has been carried out in the UK was the NSPCC research programmes as part of their Full Stop campaign. Data that was collected with regards to emotional abuse identified a number of distinct categories, which will be considered (Cawson et al., 2000). Firstly it must be highlighted that the study did not undertake any statistical analysis to explore significant differences between the genders of respondents. However, it is worth considering some of their findings. The study found that 12% of women and 10% of men reported having experienced some form of psychological attack on their self-esteem from their parents or caregivers. 20% of women and 16% of men reported experiencing being humiliated by their parents or caregiver, and 26% of women and 22% of men reported having experienced psychological control/domination from a parent or caregiver. In the category of terrorising, the study found that 9% of women and 12% of men had been threatened with being sent away. Lastly, under the category of withdrawal, which referred to the withdrawal of affection from parents and caregivers, 12% of men and 10% of women reported experiencing it. The categories encompass a wide range of emotionally abusive behaviours and give an idea of the prevalence of such behaviours within a family context. In this study women reported more emotional abuse than their male counterparts. However, as no statistical analysis was conducted on these data, no conclusions can be drawn from them with respect to the statistical significance of these reported differences.

Athlete experiences as a function of gender have been explored in a number of different psychological contexts, though not specifically with regards to emotional abuse. Research that has focused on this issue has not specifically addressed differences between genders as it has primarily focused on female athletes and their experiences (Brackenridge, 2001; Ryan, 1996; Stirling & Kerr, 2008). However, it has been pointed out that ‘investigation of male athletes’ experiences and potential gender differences in the experience of emotionally abusive behaviours is warranted’ (Stirling & Kerr, 2008, p. 179).

Gender of coach

The findings from Kerr and Stirling’s study (2008) identified that the gender of the coach was not a factor in the reported experiences of elite female swimmers (n=14). Indeed they stated that ‘both male and female coaches of the athletes used emotionally abusive behaviours’ (p. 179).

Team and individual sports contexts

The vast majority of research into abuse of some description in sport has focused on the experiences of athletes from individual sports. To date there is a paucity of research that directly compared athlete from team and individual sports with respect to emotional abuse, or any other abuse typology.

Aims of the Study

The aims of this study were to utilise the SER-Q to investigate the following aspects; competitive level, athlete gender, type of sport and coach gender. Thus a number of specific questions arise that need to be considered:

1. Do athletes at different competitive levels report different experiences in relation to both frequency and their emotional response? (This question arises specifically out of Study One which showed that when an athlete in the study became elite, the behaviour of their coach was reported to change.)
2. Is the gender of an athlete associated with differences in the reported frequency of emotionally abusive coach behaviours and resultant emotional response?
3. Is the type of sport that an athlete competed in, either team or individual, associated with differences in the reported frequency of emotionally abusive coach behaviours and resultant emotional response?
4. Is the gender of the coach associated with differences in the reported frequency of emotionally abusive coach behaviours and resultant emotional response?

Creating new scales/variables

Both Study Two and Three examined the data on an item by item basis, however, having established in Study Two that the SER-Q measures a unified construct it is appropriate to utilise a scoring system which combines scores from all of the items

as a means of interpreting responses on the SER-Q. This can be achieved by creating a unique total score for each respondent on each scale that can be analysed with respect to specific independent variables such as; competitive level, gender, type of sport and gender of the coach. In order to do this the data has to be transformed.

Data Transformation

When considering the transformation of data from the items on the SER-Q into one variable the nature of the data needs to be considered. The key issue relates to the type of data that is generated from the SER-Q, and whether it is considered either ordinal or interval data. This has implications for how that data can be analysed. There have been numerous examples of data from Likert-type scales being treated as interval data. Indeed: 'Responses to several Likert questions may be summed, providing that all questions use the same Likert scale, in which case they may be treated as interval data measuring a latent variable.' (Gruvetter & Forzano, 2006). Thus individual items, measured on the same Likert scale, can be summed to produce a summative scale creating a variable which may be treated as interval data. However, this is only acceptable if there is evidence of internal consistency, and confirmation through factor analysis that the items all load onto a single dimension (Baggaley & Hull, 1983). Analysis of the SER-Q outlined in Study Two identified that the SER-Q has excellent internal consistency (Cronbach $\alpha=0.954$), and all items loaded onto a single factor (see Study Two) Therefore, by using this method, composite scores from the Frequency Scale and the Emotional Response scale can be created respecting the different Likert-type scales used. Consequently, the

ordinal-scaled data based upon the two Likert-scales can be converted into a form of pseudo-interval-scaled data (Baggaley & Hull, 1983). In this case, the 22 items that contribute to the Frequency scale and the Emotional Response scale can be summed to create two distinct variables; The Frequency Score and the Emotional Response Score. Although these two scales have different Likert scales within each variable only one Likert scale is used for all items contributing to each variable. Thus for the Frequency the Likert scale is a 5-point scale from 'never' to 'always', and for the Emotional response it is a 7-point Likert scale of 'very negative' to 'very positive'. These can be computed for each respondent giving them a unique score on each of the variables, thus allowing for comparisons to be made between individuals on the basis of these scores.

Further data transformations were undertaken as a means of simplifying the interpretation of the scores in relation to the previously assigned categories on the SER-Q. Thus, data from the frequency scale from each item were combined and divided by 22 to create a Mean Frequency (MF) score for each respondent, and the same process was undertaken with the data from the emotional response scale to create a Mean Emotional Response (MER) score. The MF scores have a range of 1 to 5, where 1 indicates that an athlete reports never having experienced abuse from their coach, and 5 which indicates that they report having experienced it all the time. The MER scores have a range of 1-7, where 1 indicates athletes report a very negative emotional response, 4 indicates a neutral response and 7 indicates a very positive response to the reported coach behaviour. As a means of checking that the

theoretical model is still applicable in relation to the MF scores and MER scores, a correlation was undertaken. The characteristics of the MF scores and the MER scores are given in Table 6.1.

Table 6.1 *Descriptive statistics of the Mean Frequency (MF) score and Mean Emotional Response (MER) score*

SER-Q variable	n	Mean	SD	Min	Max
MF scores	543	1.50	0.706	1.0	4.64
MER scores	543	3.63	0.598	1.14	3.36

This table indicates that mean response for reported frequency is within the category of ‘never’ having experienced emotional abusive behaviour from their coach, and that the mean reported emotional response is within the category of ‘neutral’ or no emotional response.

Table 6.2 *Pearson Correlation Coefficients for the total scores;*

Correlating Mean Frequency Score with Mean Emotional Response Score on the SER-Q

R	% Variance (r^2)
-0.798 *	63.68

* Denotes significance where $p < 0.01$

The results indicate that predictive validity is maintained if the mean scores for each variable (frequency and emotional response) are negatively correlated. As shown in Table 6.2 there was a significant negative relationship between the two totals, which

is congruent with the theoretical model. Consequently, all further analysis will be undertaken using these scores. None of these transformations have any effect on previous analyses or results, all of which retain their original validity, reliability and significance.

Having established the new variables; Mean Frequency score and Mean Emotional Response score in accordance with previous research, it is appropriate to utilise them to answer the research aims identified.

Method

Participants

The participants for this study were the combined samples from Study Two and Study Three. The rationale for combining these samples was that when the demographic factors of each sample were considered they demonstrated homogeneity and, as such, could be considered to be equivalent. (See chapter five).

Thus in the new combined population the participants were 543 student athletes (353 male and 190 female) who were enrolled in a university undergraduate Sport Science degree programme in the UK. This undergraduate programme was chosen as it has the highest concentration of athletes within the University. They were athletes from 35 different sports who had competed at the following levels –

recreational = 15 (2.8%); club level = 78 (14.5%); regional level = 227 (41.7%), national level = 132 (24.2 %), international level = 91(16.5%). Elite athletes were defined as those who were competing at the National and International levels. The percentage of the sample population in each age category was as follows; 18-21yrs (85.3%); 22-25yrs (10.8%); 26-30yrs (1.5%); 31yrs and over (2.0%). The percentage of the population in each participation-duration category, which described the overall length of time competing in their sport, was as follows; 2-5yrs (22.2%); 6-10 yrs (39.6%); 11-15 yrs (29.6%); and 16 yrs or more (7.9%). The athletes were coached by men (80.4%) and women (19.6%).

Procedures

The data was collected as previously outlined in Study Two and Study Three. Procedures were carried out in accordance with those outlined in Study Two and Study Three respectively.

Instruments

The 22-item SER-Q (See Chapter Four; Study Two and Appendix B)

Data Analysis

The main issue with respect to the data analysis is the type of statistical procedure to undertake: either parametric or non-parametric. This is an important question to consider given the nature of the data which is not strictly interval data, but rather

pseudo-interval-scaled data which assumes interval data, with ordinal Likert scale items. In a recent review of the literature on this topic, Jaccard and Wan (1996, p. 4) state that, 'for many statistical tests, rather severe departures (from 'intervalness') do not seem to affect Type I and Type II errors dramatically'. These can be applied only when the components are more than 5, (i.e. more than 5 Likert questions or Likert questions of more than 5 levels) (Jaccard & Wan, 1996), which is the case for the SER-Q. This would suggest that the use of parametric statistics to interpret the data is appropriate. However, parametric tests can only be applied if the data fulfils certain assumptions; the sample data is normally distributed, and the score in different groups have homogenous variances. Therefore there needs to be careful consideration of; variances (equal, unequal), distributions (normal, heavy-tailed, skewed), and sample sizes (equal, unequal) before a parametric or non-parametric test can be selected (Skovlund & Fenstad, 2001). The findings are summarized in Table 6.3.

When the data violates these assumptions there is a greater risk of making Type I errors. As stated by Chong-Ho (2008) 'the efficiency of the Wilcoxon-Mann-Whitney U test is $3/\pi$ (0.96) with respect to the t-test if the data are normal. If they are non-normal, the relative efficiency of the non-parametric test can be arbitrarily better than the t-test. Where you lose efficiency with nonparametric methods is with estimation of absolute quantities, not with comparing groups or testing correlations' (p. 3).

Table 6.3 An Adapted Summary of Decisions Influencing Choice of Statistical Test (Skovlund & Fenstad , 2001).

Variiances	Distributions	Sample sizes	Parametric test
Equal	Normal	Equal	*
		Unequal	*
	Heavy tailed	Equal	+
		Unequal	+
	Skewed	Equal	X
		Unequal	X
Unequal	Normal	Equal	+
		Unequal	X
	Heavy tailed	Equal	+
		Unequal	X
	Skewed	Equal	X
		Unequal	X

Symbols: * = method of choice, + = acceptable, -x= not acceptable

The data in this study were initially analysed with respect to; variances (equal, unequal), distributions (normal, heavy-tailed, skewed), and sample sizes (equal, unequal) in order to establish the most appropriate type of statistics to use, either parametric or non-parametric. This was conducted with the two variables; the Mean Frequency Score and Mean Emotional Response Score.

Table 6.4 *Descriptive statistics for the Mean Frequency and Mean Emotional Response: in relation to the dispersal and distribution of the data*

SER-Q Variable	n	Mean	Skewness		Kurtosis		Variance
			Statistic	Std Error	Statistic	Std Error	
MF scores	543	1.50	2.364	0.105	5.495	0.209	0.358
MER scores	543	3.63	-1.943	0.105	2.364	0.209	0.499

These findings reveal that the data were not normally distributed; both variables were skewed, with the Mean Frequency skewed to the right of the mean and the Mean Emotional Response skewed to the left. Furthermore, the Kurtosis values for each variable were much greater than 3 indicating that they were not normally distributed. Furthermore, in all instances, the samples sizes for the analysis to be undertaken were unequal, which in accordance with Skovlund and Fenstad (2001) adds to the problem of utilising parametric tests. Consequently, it would not be appropriate to undertake parametric analysis on this data; therefore only non-parametric statistical tests can be implemented.

Each question, outlined in the aims of the study, was analysed using the following non-parametric statistical methods.

1. Kruskal-Wallis Test to investigate differences between the five competitive levels of the athlete on the variables; MF scores and MER scores

2. Mann-Whitney-U Test to investigate differences between the genders of the athlete on the variables; MF scores and MER scores
3. Mann-Whitney-U Test to investigate differences between the type of sport either team or individual on the variables; MF scores and MER scores
4. Mann-Whitney-U Test to investigate differences between the gender of the coach on the variables; MF scores and MER scores

Results

Competitive Level: Frequency

The first focus of the analysis was to consider the question of differential experiences of coach behaviour, and subsequent emotional response in relation to the level that the athletes were competing when they were children; Recreational, Club, Regional, National, or International. First, the data were analysed with respect to the reported frequency of coach behaviour.

Table 6.5 Distribution of Percentages (%) of Responses to Frequency Category in each competitive level

	n	Never – Rarely	Rarely – Sometimes	Sometimes – Very Often	Very Often - Always
Recreational	15	100 %	/	/	/
Club	78	92.3 %	7.7 %	/	/
Regional	227	97.4 %	2.6 %	/	/
National	132	77.3 %	12.9 %	9.8 %	/
International	91	61.5 %	16.5 %	9.9 %	12.1 %
<i>Total Mean</i>	543	85.7 %	7.94 %	3.94 %	2.42 %

When athletes of all levels were considered together (n=543) the most frequently chosen questionnaire response (85.7 %) was that they ‘never/rarely’ reported emotionally abusive behaviour from their coaches. This was more than ten times as frequently chosen as the next highest category (7.94%) - of ‘rarely/sometimes’. The overall mean response for the total population of athletes (n=543) showed that only 3.94% of athletes chose the questionnaire response of ‘sometimes/very often’, and 2.42% of athletes chose the questionnaire response of ‘very often/always’(see Table 6.5).

When the non-elite athletes (i.e. ‘recreational’, ‘club’ and ‘regional’ athletes) were considered alone (n=320), their responses were more extreme. For them the most frequently chosen questionnaire response (96.5%) was ‘never/rarely’ on the frequency scale. This was more than twelve times more frequently chosen than the next highest category of ‘rarely’ or ‘sometimes’ (3.43%), (see Table 6.5). None of the non elite athletes ever chose the response category of ‘sometimes’ or ‘very often’; or ‘very often ’or ‘always’.

When elite athletes (i.e. ‘national’ and ‘international’ athletes) were considered alone (n=223), their responses were somewhat different. For them the most frequently chosen questionnaire response was still the ‘never/rarely’ category (69.4%).The next most frequently chosen response – ‘sometimes/ very often’, accounted for 14.7% of the groups responses which was more than four times greater than the responses given by non-elite athletes (see Table 6.5).

When the 'recreational' level athletes were considered alone (n=15), the only response that they choose (100%) was in the 'never/rarely' category (see Table 6.5).

When the 'club' level athletes were considered alone (n=78), their most frequently chosen questionnaire response - 92.3%, was in the 'never/rarely' category. The only other category chosen (7.7%) was the response categories of 'rarely/sometimes', (see Table 6.5).

When the 'regional' level athletes were considered alone (n=227), their most frequently chosen questionnaire response - 97.4%, was in the 'never/rarely' category. The only other category chosen (2.6%) was the response categories of 'rarely/sometimes', (see Table 6.5).

When the 'national' level athletes were considered alone (n=132), their most frequently chosen questionnaire response- 77.3%, was in the 'never/rarely' category. 12.9% of athletes chose the response categories of 'rarely/sometimes', and 9.8% chose the category of 'sometimes/very often' (see Table 6.5).

When the 'international' level athletes were considered alone (n=91), their responses were distinctly different from all others. Although their most frequently chosen questionnaire response was the 'never/rarely' categories (61.5%), the next frequently chosen response- that they reported was 'rarely/sometimes' (16.5%). However, 9.9% chose the category of 'sometimes' or 'very often'. This was proportionally more

than three-and-a-half times more than the mean for the athletes as a whole, and more than three times more than the ‘national’ athletes (see table 6.6). This group of athletes (12.1%) was the only group that ever chose the category of ‘very often/always’.

Table 6.6 *Descriptive Statistics for the MF Score: as a Function of the Competitive Level of the Athletes, n=543*

SER-Q Score	Level	n	Median	Mean	SD	Min	Max
	Recreational	15	1.09	1.20	0.306	1	1.95
	Club	78	1.13	1.29	0.523	1	3.50
MF Score	Regional	227	1.22	1.32	0.296	1	2.95
	National	132	1.36	1.63	0.712	1	3.82
	International	91	1.40	2.27	1.240	1	4.64

Table 6.6 shows that the reported MF scores changed as a function of competitive level; the ‘international’ athletes reported the highest frequency mean and median of negative coach behaviour and the ‘recreational’ athletes the least.

The MF scores for the five competitive levels ranged from 2.27 (‘international’ athletes) to 1.20 (‘recreational’ athletes), with the means of each of the elite groups (i.e. ‘national’ and ‘international’ athletes) being higher than each of the non-elite athletes (i.e. ‘recreational’, ‘club’ and ‘regional’ athletes). The elite groups had higher MF scores than did the non-elite groups (see Table 6.6). This pattern is exactly the same when the medians are considered with the median value for the

‘recreational’ athletes being the lowest (1.09), and the median for the ‘international’ athletes being the highest (1.40), (see Table 6.6).

The elite athletes also demonstrated the greatest variability in the responses on their MF scores, as illustrated by the standard deviations, 0.712 for national athletes and 1.240 for international athletes (see Table 6.6).

In order to establish if the apparent differences shown in table 6.5 were significant these were tested using a Kruskal-Wallis test which compared the MF scores across the five competitive levels. The dependant variable was the MF score and the independent variable was the competitive level.

Table 6.7 *Results from the Kruskal- Wallis Test for the MF Score: as a Function of the Competitive Level of the Athletes*

n	df	K	p
543	4	37.765	0.000*

* Denotes significance where $p < 0.001$

The differences between the MF scores and the level at which the athletes competed was statistically significant ($p < 0.001$), (see Table 6.7). In order to identify where the significant differences were with respect to each competitive level, post hoc Mann Whitney –U tests were conducted.

Table 6.8 Summary of Post Hoc analysis using Mann Whitney tests for MF Scores reporting p values

	n	Recreational	Club	Regional	National	International
Recreational	15	/	0.336	0.052	0.003 **	0.003 **
Club	78		/	0.28 *	0.000 ***	0.000 ***
Regional	227			/	0.001 **	0.000 ***
National	132				/	0.211
International	91					/

* Denotes significant difference between groups; $p < 0.05$

** Denotes significant difference between groups; $p < 0.01$

*** Denotes significant difference between groups; $p < 0.001$

The post hoc Mann Whitney tests show that there were significant differences between all the non-elite athlete groups; (recreational, club and regional), and the elite athlete groups; (national and international) (see Table 6.8). Specifically, there was no statistically significant difference between the MF scores of the recreational-level ($n=15$) athletes and club-level ($n=78$) athletes, ($p > 0.05$). There was no statistically significant difference between the MF scores of the recreational-level ($n=15$) athletes and regional-level ($n=227$) athletes, ($p > 0.05$).

There was a statistically significant difference between MF scores of recreational-level ($n=15$) athletes and national-level ($n=132$) athletes, ($p < 0.01$).

There was a statistically significant difference between MF scores of recreational-level (n=15) athletes and international-level (n=91) athletes, ($p < 0.01$).

There was a statistically significant difference between MF scores of recreational-level (n=15) athletes and national-level (n=132) athletes, ($p < 0.01$).

There was a statistically significant difference between the MF scores of club-level (n=78) athletes and regional-level (n=227) athletes, but only at the $p < 0.05$ level.

There was a statistically significant difference between MF scores of club-level (n=78) athletes and national-level (n=132) athletes, ($p < 0.01$).

There was a statistically significant difference between MF scores of club-level (n=78) athletes and international-level (n=91) athletes, ($p < 0.01$).

There was a statistically significant difference between MF scores of regional-level (n=227) athletes and national-level (n=132) athletes, ($p < 0.01$).

There was a statistically significant difference between MF scores of regional-level (n=227) athletes and international-level (n=91) athletes, ($p < 0.01$).

These results reveal that the differences between the international athletes and all the non-elite groups were generally the strongest of all, but there were no statistically

significant differences between the two groups of elite athletes (i.e. the national-level and international-level athletes); and, generally, there were either no statistically significant differences between any of the non-elite groups, or the differences between them were statistically the weakest of all.

It can be concluded, therefore, that there are statistically significant differences between the elite and non-elite groups of athletes in their reporting of the frequency of emotionally abusive behaviour of their coaches when they were child athletes.

Competitive Level: Emotional Response

The next phase of the analysis considered the competitive level of the athletes with respect to their reported MER scores from the SER-Q.

Table 6.9 *The Distribution of Percentages (%) of Responses in the Emotional Response Category in each Competitive Level*

	n	Very negative – Negative	Negative – Slightly negative	No effect	No effect – Slightly positive
Recreational	15	/	/	100 %	/
Club	78	1.3 %	6.4 %	85.9 %	6.4 %
Regional	227	0.4 %	2.2 %	86.3 %	11.1 %
National	132	1.5 %	12.9 %	65.2 %	20.4 %
International	91	19.5 %	14.3 %	64.0 %	2.2 %
<i>Total Mean</i>	<i>543</i>	<i>4.54 %</i>	<i>7.16 %</i>	<i>80.28 %</i>	<i>8.02 %</i>

When athletes of all levels were considered together (n=543) the most frequently chosen questionnaire response (80.28 %) was category 'no effect'. This was more than ten times as frequently chosen as the next highest category (8.02%) - of 'no effect/slightly positive'. The overall mean response for the total population of athletes (n=543) showed that only 4.54% of athletes chose the questionnaire response of 'very negative/negative', and 7.16% of athletes chose the questionnaire response of 'negative/slightly negative'(see Table 6.9).

When the non-elite athletes (i.e. 'recreational', 'club' and 'regional' athletes) were considered alone (n=320), their responses were more extreme. For them the most frequently chosen questionnaire response (90.07%) was 'no effect' on the emotional response scale. This was more than fourteen times more frequently chosen than the next highest category of 'no effect/slightly positive' (5.83%), (see Table 6.4). Only 0.56% of the non elite athletes ever chose the response category of 'very negative/negative' and 2.86% choose the category of 'negative/slightly negative'

When the 'recreational' level athletes were considered alone (n=15), the only response that they chose (100%) was in the 'no effect' category (see Table 6.9).

When the 'club' level athletes were considered alone (n=78), their most frequently chosen questionnaire response- 85.9%, was in the 'no effect' category. The next highest categories chosen (6.4%) was the response categories of 'negative/slightly

negative', and 'no effect/ slightly positive'. The least chosen response category (1.3%) was the category of 'very negative/ negative' (see Table 6.9).

When the 'regional' level athletes were considered alone (n=227), their most frequently chosen questionnaire response - 86.3%, was in the 'no effect' category. The next highest category was 'no effect/ slightly positive'(11.1%) response categories. 2.2% of regional level athletes chose 'negative/ slightly negative' response categories, and 0.4% chose the response categories of 'very negative/ negative', (see Table 6.9).

When elite athletes (i.e. 'national' and 'international' athletes) were considered alone (n=223), their responses were somewhat different. For them the most frequently chosen questionnaire response was still the 'no effect' category (64.6%). The next most frequently chosen response - 'negative/ slightly negative', accounted for 13.6% of the groups responses which was more than four times greater than the responses given by non-elite athletes (see Table 6.9).

When the 'national' level athletes were considered alone (n=132), their most frequently chosen questionnaire response - 65.2%, was in the 'no effect' category. 12.9% of athletes chose the response categories of 'negative/slightly negative', and 1.5% chose the category of 'very negative/negative' (see Table 6.9). This group of athletes reported the greatest percentage in the 'no effect/ slightly positive' (20.4%) category.

When the ‘international’ level athletes were considered alone (n=91), their responses were distinctly different from all others. Although their most frequently chosen questionnaire response was the ‘no effect’ category (64.0%) the next frequently chosen response - was ‘very negative/negative’ (19.5%) category. When this group is compared to all other groups their responses were proportionally thirteen times greater than the next highest group. Moreover, 14.3% chose the category of ‘negative/slightly negative’ which again was the highest group reporting in this category.

In order to establish if the apparent differences shown in Table 6.9 were significant the data were analysed using Kruskal-Wallis Test which compared the MER scores across the competitive levels. The dependant variable was the MER scores and the independent variable was the competitive level.

Table 6.10 *Descriptive statistics for the MER Score: Comparing the Competitive Level of the Athletes*

	N	Median	Mean	SD	Min	Max
Recreational	15	4.00	3.88	0.293	3.18	4.09
Club	78	3.86	3.75	0.460	1.91	5.23
Regional	227	3.86	3.78	0.438	1.14	5.18
National	137	3.79	3.57	0.638	1.55	5.32
International	91	3.63	2.92	1.050	1.14	4.32

Table 6.10 indicates that the reported MER scores changed as a function of competitive level; the international athletes reported the most negative emotional response to their coach behaviour and the recreational athletes the least.

The MER scores for the five performance levels ranged from 2.92 ('international' athletes) to 3.85 ('club' athletes), with the means of each of the elite groups (i.e. 'national' and 'international' athletes) being higher than each of the non-elite athletes (i.e. 'recreational', 'club' and 'regional' athletes). The elite groups had lower MER scores than did the non-elite groups (see Table 6.10)

The elite athletes demonstrated the greatest variability in the responses on their MER scores, as illustrated by the standard deviations, 0.638 for national athletes and 1.05 for international athletes (see Table 6.10).

These results indicate that there were differences in the reporting of the MER scores. The most negative emotional response was reported by those athletes who competed at an international level when they were children. In addition, the recreational athletes reported the least negative emotional response to their coach's behaviour.

In order to establish if the apparent differences shown in Table 6.8 were significant these were analysed using a Kruskal-Wallis Test which compared the MER scores across competitive levels. The dependant variable was the MER score and the independent variable was the competitive level.

Table 6.11 *Results from the Kruskal-Wallis Test for the MER Scores: as a Function of the Competitive Level of the Athletes*

n	df	K	p
543	4	38.966	0.000 *

* Denotes significant difference between groups; $p < 0.01$

When all the athletes were considered together ($n=543$), the differences between the MER scores and the level at which the athletes competed was statistically significant ($p < 0.001$), (see Table 6.11). In order to identify where the significant differences were with respect to each competitive level, post hoc Mann Whitney tests were conducted.

Table 6.12 *Summary of Post Hoc Analysis using Mann Whitney-U Tests for MER Scores Reporting p Values*

	n	Recreational	Club	Regional	National	International
Recreational	15	/	0.027 *	0.045 *	0.004 **	0.000 ***
Club	78		/	0.642	0.003 **	0.000 ***
Regional	227			/	0.001 **	0.000 ***
National	132				/	0.011 *
International	91					/

* Denotes significant difference between groups; $p < 0.05$

** Denotes significant difference between groups; $p < 0.01$

*** Denotes significant difference between groups; $p < 0.001$

The post hoc Mann Whitney-U Tests show that there were significant differences between all the non-elite athlete groups; recreational, club and regional, and the elite athlete groups; national and international (see Table 6.12). Specifically; there was a statistically significant difference between the MER scores of the recreational-level (n=15) athletes and club-level (n=78) athletes, but only at the $p<0.05$ level.

There was a statistically significant difference between the MER scores of the recreational-level (n=15) athletes and regional-level (n=227) athletes, but only at the $p<0.05$ level.

There was a statistically significant difference between the MER scores of the recreational-level (n=15) athletes and national-level (132) athletes ($p<0.01$).

There was a statistically significant difference between the MER scores of the recreational-level (n=15) athletes and international-level (91) athletes ($p<0.01$).

There was no statistical significant difference between the MER scores of club-level (n=78) athletes and regional-level (n=227) athletes ($p>0.05$).

There was a statistically significant difference between the MER scores of the club-level (n=78) athletes and national-level (n=132) athletes ($p<0.01$).

There was a statistically significant difference between the MER scores of the club-level (n=78) athletes and international-level (n=91) athletes ($p<0.01$).

There was a statistically significant difference between the MER scores of the regional-level (n=227) athletes and national-level (n=132) athletes ($p<0.01$).

There was a statistically significant difference between the MER scores of the regional-level (n=227) athletes and international-level (n=91) athletes ($p<0.01$).

There was a statistically significant difference between the MER scores of the national-level (n=132) athletes and international-level (n=91) athletes, but only at the $p<0.05$ level.

These results reveal that the differences between international athletes and all the non-elite groups were strongest of all, but the difference between the two groups of elite athletes (i.e. the national-level and international-level athletes) was statistically weak; and generally, there were either no statistically significant differences between any of the non-elite groups, or the difference between them were statistically weaker than those with the international athletes.

It can be concluded, therefore, that there are statistically significant differences between the international-level athletes and all other athletes groups in their

reporting of their emotional response to the reported abusive behaviour by their coaches when they were child athletes.

Athlete Gender

The second phase of the analysis considered the gender of the athlete with respect to MF scores and MER scores (refer to Table 6.13).

Table 6.13 *Distribution of Total Percentages (%) of Responses to the Frequency Category by Athlete Gender*

Gender	n	Never – Rarely	Rarely – Sometimes	Sometimes – Very Often	Very Often - Always
Male	353	86.1 %	9.4 %	3.1 %	1.4 %
Female	190	85.8 %	4.7 %	6.9 %	2.6 %

When male athletes were considered alone (n=353) the most frequently chosen questionnaire response (86.1%) was the ‘never/rarely’ categories. When female athletes were considered alone (n=190) the most frequently chosen questionnaire response (85.8%) was also from the ‘never/rarely’ categories.

Male athletes (9.4%), chose the questionnaire response of ‘rarely/sometimes’ and, 3.1% chose the questionnaire response of ‘sometimes/very often’. This compared with 4.7% of females athletes who chose the questionnaire response of ‘rarely/sometimes’ and 6.9% of female athletes who chose ‘sometimes/very often’.

The percentage distribution across the frequency categories suggests that women reported slightly different experiences than their male counterparts with respect to the reporting on the MF scale.

Table 6.14 *Descriptive Statistics for the MF Score: Comparing the Gender of the Athletes*

Gender	n	Median	Mean	SD	Min	Max
Male	353	1.22	1.47	0.632	1	4.41
Female	190	1.25	1.56	0.826	1	4.64

The mean MF scores for males (1.47) and females (1.56) show only a slight difference between the two groups with the females reporting a lower mean value on their MF scores (see table 6.14). This is also reflected in the median values which were 1.22 for males and 1.25 for females. To test whether this difference was statistically significant the data were analysed using a Mann-Whitney U test.

Table 6.15 *Mann-Whitney U test for the MF score: Comparing Athlete's Gender*

n	MU	Z	p
543	33315.0	-0.126	0.899

The differences between the MF scores for male and female athletes was not significant; ($p=0.899$), at the 0.05 level (see table 6.15).

Table 6.16 *Distribution of Total Percentages (%) Responses to Emotional Response Across all Categories: by Athlete Gender*

Gender	n	Very negative – Negative	Negative – Slightly negative	No effect	No effect – Slightly positive
Male	353	2.8 %	6.5 %	80.5 %	10.2 %
Female	190	6.3 %	6.9 %	76.8 %	10.0 %

When male athletes were considered alone (n=353) the most frequently chosen questionnaire response (80.5%) was that they reported behaviour of their coaches had no emotional effect on them. When female athletes were considered alone (n=190) the most frequently chosen questionnaire response (76.8%) was the same, although slightly less female athletes than males chose this response.

2.8% of male athletes chose the questionnaire response of ‘very negative/negative’ with respect to the emotional impact that the behaviour of the coach had on them; compared to over twice (6.3%) the percentage of female athletes who chose this response. Both male (6.5%) and female (6.9%) athletes chose the questionnaire response of ‘negative/slightly negative’. The percentages of females athletes (10.0%) and male athletes (10.2%) who chose the questionnaire response of ‘no effect /slightly positive’ was again very similar.

Table 6.17 *Descriptive Statistics for the MER Score: Comparing the Gender of the Athletes*

Gender	n	Median	Mean	SD	Min	Max
Male	353	3.81	3.66	0.562	1.14	5.23
Female	190	3.81	3.58	0.659	1.18	5.32

The mean MER scores for males (3.66) and females (3.58) show a slight difference between the two groups with the females reporting a lower mean value on their MER scores (see Table 6.17). This would suggest that there were no significant differences in the reported MER scores between male and females. This assumption was tested with a Mann-Whitney U test.

Table 6.18 *Mann-Whitney U test of the MER Scores: Comparing Athlete's Gender*

N	MU	Z	p
543	95769.0	-1.102	0.270

The differences between the MER scores for male and female athletes were not significant; ($p=0.270$), at the 0.05 level (see Table 6.18).

Type of Sport: Team and Individual

The third analysis considered whether the type of sport that an athlete participated in when they were a child had an effect on their retrospective reporting of their experiences of being coached. The first question considered whether athletes from team sports or individual sports experienced more or less emotionally abusive behaviour from their coaches.

Table 6.19 *Distribution of Total Percentages (%) of Responses to Frequency Category: by Type of Sport*

Sport	n	Never – Rarely	Rarely – Sometimes	Sometimes – Very Often	Very Often - Always
Team	349	89.1 %	6.3 %	4.6 %	0%/
Individual	194	80.4 %	10.8 %	5.2 %	3.6 %

When team athletes were considered alone (n=349) the most frequently chosen questionnaire response (89.1%) was in the ‘never/rarely’ categories. When individual athletes were considered alone (n=194) the most frequently chosen questionnaire response (80.4%) was also in the ‘never/rarely’ category; very similar to that of team athletes. Only individual athletes (3.6%) choose the ‘very often/always’ response.

Table 6.20 *Descriptive Statistics for the MF Scores: Comparing Athletes from Team and Individual Sports*

Sport	n	Median	Mean	SD	Min	Max
Team	349	1.22	1.45	0.605	1.0	4.27
Individual	194	1.27	1.61	0.851	1.0	4.64

The mean MF scores for athletes from team sports (1.61) and athletes from individual sports (1.45) show a small difference between the two groups with the athletes from individual sports reporting a higher mean value on their MF scores (see Table 6.20). Furthermore, this is also reflected in the median values which were 1.22 for athletes from team sports and 1.27 for athletes from individual sports. To test whether this difference was statistically significant the data were analysed using a Mann-Whitney U test.

Table 6.21 *Mann Whitney U Test for MF Scores: Comparing Athletes from Team and Individual Sports*

n	MU	Z	p
543	31486.5	-1.354	0.176

The differences between the MF scores for athletes from team and individual sports was not significant; ($p=0.176$), at the 0.05 level (see Table 6.21).

Table 6.22 *Distribution of Total Percentages (%) to Emotional Response Across all Categories: by Type of Sport*

Sport	n	Very negative – Negative	Negative – Slightly negative	No effect	No effect – Slightly positive
Team	349	2.6 %	5.7 %	82.0 %	9.7 %
Individual	194	6.2 %	11.8 %	72.2 %	9.8 %

Table 6.22 shows that when athletes from team sports were considered alone (n=349) the most frequently chosen questionnaire response (82.0%) was that the reported behaviour of their coaches had no emotional effect on them. When athletes from individual sports were considered alone (n=194) the most frequently chosen questionnaire response (72.2%) was also that the reported behaviour of their coach had no emotional effect on them.

Table 6.23 *Descriptive Statistics for the MER Scores: Comparing Athletes from Team and Individual Sports*

Sport	n	Median	Mean	SD	Min	Max
Team	349	3.86	3.52	0.711	1.14	5.32
Individual	194	3.86	3.69	0.516	1.27	5.23

The mean MER scores for athletes from team sports (3.69) and athletes from individual sports (3.52) show a small difference between the two groups with the athletes from individual sports reporting a higher mean value on their MER scores

(see Table 6.23). Furthermore, this is also reflected in the median values which were 3.86 for athletes from team sports and 3.81 for athletes from individual sports.

There was however, greater variation in the MER scores from the athletes from individual sports which is highlighted by the standard deviation (0.771). To test whether this difference was statistically significant the data were analysed using a Mann-Whitney U test.

Table 6.24 *Mann-Whitney U test for MER Scores: Comparing Athletes from Team and Individual Sports*

N	MU	Z	p
543	31185.5	-1.527	0.127

The differences between the MER scores for athletes from team and individual sports was not significant; ($p=0.127$), at the 0.05 level (see Table 6.24).

Gender of the Coach

The final element of analysis considered the gender of the athletes coach in order to establish if this affected the respondents reported experiences.

Table 6.25 *Distribution of Total Percentages (%) of Responses to Frequency Category: by Coach Gender*

Coach Gender	n	Never – Rarely	Rarely – Sometimes	Sometimes – Very Often	Very Often - Always
Male	436	85.3 %	9.2 %	4.1 %	1.4 %
Female	107	86.4 %	4.5 %	6.3 %	2.8 %

Table 6.25 shows that when male coaches were considered alone (n=436) the most frequently chosen questionnaire response (85.3%) was that they reported ‘never/rarely’ experiencing emotionally abusive behaviour from their coach. When female coaches were considered alone (n=107) the most frequently chosen questionnaire response (86.4%) was also that they reported ‘never/rarely’ experiencing emotionally abusive behaviour from their coach. 9.2% of athletes with male coaches chose the questionnaire response of ‘rarely/sometimes’ and 4.1% chose the questionnaire response of ‘sometimes/very often’. This compared with 4.5% ‘rarely/sometimes’ of athletes with female coaches who chose the questionnaire response of and 6.3% of female athletes who chose ‘sometimes/very often’ (see Table 6.23). Comparison of athletes choosing the category showed that athletes with female coaches chose this category twice as often (2.8%) as those with male coaches (1.4%).

Table 6.26 *Descriptive statistics for the Mean Frequency Score: Comparing the Gender of the Coach*

Coach Gender	n	Median	Mean	SD	Min	Max
Male	436	1.27	1.49	0.680	1	4.64
Female	107	1.22	1.54	0.807	1	4.59

The mean MF scores for athletes with male coaches (1.49) and athletes with female coaches (1.54) showed a small difference between the two groups with the athletes with female coaches reporting a lower mean value on their MF scores (see Table 6.26). The standard deviation (0.807) for the athletes coached by women showed that there was greater variation in the reported MF scores in this group in comparison to the athletes who were coached by men (0.680), (see Table 6.26).

Furthermore, when the median values are considered for athletes who were coached by men (1.27) and athletes who were coached by women (1.22) these are also very similar. These results appear to show that the majority of athletes, regardless of the gender of their coach, reported similar MF scores. To check this assumption a Mann-Whitney U test was conducted to test for significant differences between the two groups.

Table 6.27 *Mann Whitney Test for MF Score: Comparing the Gender of the Coach*

n	MU	Z	p
543	23164.5	-0.111	0.911

The differences between the MF scores for athletes with male and female coaches was not significant ($p=0.911$), at the 0.05 level (see Table 6.27).

Table 6.28 *Distribution of Total Percentages (%) Responses to Emotional Response across all Categories: by Coach Gender*

Coach Gender	n	Very negative – Negative	Negative – Slightly negative	No effect	No effect – Slightly positive
Male	436	3.7 %	8.0 %	79.4 %	8.9 %
Female	107	4.7 %	8.4 %	73.8 %	13.1 %

When athletes who were coached by male coaches were considered alone ($n=436$) the most frequently chosen questionnaire response (79.4%) was that the reported behaviour of their coaches had no emotional effect on them. When athletes who were coached by female coaches were considered alone ($n=107$) the most frequently chosen questionnaire response (73.8%) was also that the reported behaviour of their coach had no emotional effect on them.

8.0% of athletes with male coaches chose the questionnaire response of ‘negative/slightly negative’, and 3.7% chose the questionnaire response of ‘very negative/ negative’. This compared with 8.4% of athletes with female coaches who chose the questionnaire response of ‘negative/slightly negative’ and 4.7% of female athletes who chose ‘very negative/negative’ (see Table 6.28).

The table above shows that there was a very similar distribution of responses among the emotional response categories with the exception of the last category where it would appear that athletes who were coached by women experienced more neutral/positive emotions than athletes who were coached by men. To test for the statistical significance of this finding a Mann Whitney-U Test was undertaken.

Table 6.29 *Descriptive Statistics for the MER score: Comparing the Gender of the Coach*

Coach Gender	n	Median	Mean	SD	Min	Max
Male	436	3.81	3.64	0.596	1.14	5.32
Female	107	3.86	3.60	0.610	1.18	4.27

The mean MER scores for athletes with male coaches (3.64) and athletes with female coaches (3.60) showed a small difference between the two groups with the athletes with female coaches reporting a lower mean value on their MER scores (see Table 6.29).

The standard deviation (0.610) for the athletes coached by women showed that there was greater variation in the reported MER scores in this group in comparison to the athletes who were coached by men (0.596), (see Table 6.29). These results appear to show that the majority of athletes, regardless of the gender of their coach, reported similar MER scores. To check this assumption a Mann-Whitney U test was conducted to test for significant differences between the two groups.

Table 6.30 Mann Whitney U Test for Mean Emotional Response: Comparing the Gender of the Coach

n	MU	Z	p
543	23137.5	-0.130	0.897

The differences between the MER scores for athletes with male and female coaches was not significant ($p=0.897$), at the 0.05 level (see Table 6.30).

Summary of the most significant results

1. Significant differences were found with respect to national and international athletes on the variables; Mean Frequency Score and Mean Emotional Response Score
2. No significant differences were found between male and female athletes on the variables; Mean Frequency Score and Mean Emotional Response Score
3. No significant differences were found between team or individual athletes on the variables; Mean Frequency Score and Mean Emotional Response Score
4. No significant differences were found between athletes who were coached by men or women on either variable; Mean Frequency Score or Mean Emotional Response Score

Discussion

This study posed a number of specific questions which related to examining different populations of athletes with respect to the two variables; Mean Frequency Score and Mean Emotional Response Score.

The first analysis identified that there was a significant difference between national and international athletes and all other levels of athlete on both the Mean Frequency Score and the Mean Emotional Response Score, in that these athletes reported significantly higher ($\alpha=0.001$) frequencies of emotionally abusive coach behaviour and significantly more negative emotional response to it. This supports Burke (2001) and Ryan (1996), who highlighted that elite coaching methodologies create a 'power over' culture with emotional abusive behaviour evident within it. The reasons for these differences may be multi-faceted and need consideration. The time spent with the coach was much longer for those athletes competing at both national and international levels (Donnelly, 1997) and this could be a contributing factor in the differences reported, i.e. where the child athlete is subjected to a greater exposure to their coaches' behaviour, and where this was emotionally abusive, and the effects would be more detrimental and damaging. As previously stated (O'Hagan, 1995), it is the frequency with which a child experiences emotional abuse that causes emotional and psychological problems. Thus national and international athletes may be more vulnerable to emotional abuse because they spend a large amount of time

with their coaches, often more than they spend with their parents. This is different to athletes who are competing recreationally who may only be with their coach for an hour a week. Consequently, these athletes will not experience the damaging effect of emotional abuse from their coaches, even if their behaviour was negative, simply because the frequency of exposure was limited. In the case of recreational and club athletes the amount of time that they spend working with their coach will be considerably less than elite athletes, who can train as much as 25 hours per week (Burke, 2001).

The second facet that might contribute to the explanation of the results might be the culture of sport and the normative behaviour that is inherent within it. Research has shown (Brackenridge, 1997; Coakley, 1992; Cushion & Jones, 2006) that the accepted model within elite sporting environments is one where the coach has all the power and if an athlete is to be successful they must adhere to the rigid systems of control that exist within it. Thus, as Navarre (1987) stated 'When the abusive act is so common and acceptable that in the culture or the community that the probability of a negative outcome is neither recognised nor believed' (p.47). The world of elite sport is often a closed one where the values and norms are rarely under scrutiny from outsiders, and elite coaches are generally ex-athletes themselves. This may contribute to the differences found between the 'elite' athletes within this study and the other 'non-elite' athletes.

Significant differences were also found between 'club' and 'regional' athletes with respect to the MF scores, and between 'recreational' and 'club'; and 'recreational' and 'regional' level athletes on the MER scores. However, these results were only significant at the 0.05 level, and so we cannot have complete confidence in them.

There was no significant difference between the genders of the athletes when this was considered independently of other factors. This would support research from child maltreatment literature which indicates that where differences have been reported between genders (Cawson et al., 2005) these have not been reported as significant.

There was no significant difference found between the types of sport, either team or individual in relation to both the Mean Frequency Score and the Mean Emotional Response Score.

There was no significant difference reported between those athletes who were coached by men and those who were coached by women. This would support literature from child maltreatment which does not differentiate between men and women with regards to being the perpetrators of emotional abuse. Both are equally as likely or unlikely to be emotionally abusive. Furthermore, this supports Stirling and Kerr (2008) who found emotional abusive behaviours in swimming coaches irrespective of their gender.

Implications for the theoretical model

These findings provide further support for the model as the athletes who were retrospectively reporting significantly different experiences with respect to the frequency were also doing so in relation to the emotional response. These findings raise the question as to whether there may be two very different types of child athlete sporting experiences which would appear to be dependent of the level at which the child is competing. In essence one describes negative experiences (emotional abuse) and the other one which describes positive experiences. Thus, the theoretical model could be said to be illustrating the experiences of elite athletes and, given that the majority of athletes reported never having experienced negative coaching behaviour from their coaches this model would not be applicable to them.

Emergent Questions

So far all of the studies have focused on the frequency (MF) and emotional response (MER) scales. However, the third scale that of 'Performance' still needs to be considered, both in relation to the other scales and with respect to the independent variables of competitive level, athlete gender, type of sport and coach gender.

Chapter Seven

Study Five: Exploring the relationship between reported Frequency, Emotional Response and Perceived Performance

Introduction

In sport, and in particular elite sport, the performance outcomes that any athlete is able to produce marks their success or failure. Understanding what factors may affect that performance, and in particular an athlete's assessment of their own and, therefore perceived, performance is important in order to understand fully the relationship between their reported frequencies, emotional response and reported performance consequences as a child athlete. The effect of the frequency of negative coach behaviour, and athlete's emotional response to it in relation to their perceived performance as a child athlete has not yet previously been researched.

Whilst this study does not specifically measure performance it is important to explore research that has examined this aspect of the child maltreatment process. The consideration of 'outcomes' as a consequence of emotional abuse have been discussed within the child maltreatment literature, and it has been recognised that even if the action is not directly observable, the outcomes may well be (Navarre, 1987). These outcomes can be related specifically to the emotional and

psychological functioning of an individual, or can be performance outcomes which may be more easily observed and hence measured.

Within the child maltreatment literature, the effect of different abuse typologies on performance has tended to focus solely on 'academic performance'. Using data such as grades achieved, grade repetitions (in the USA) and disciplinary markers for example suspensions, comparisons have been made between different child populations. Kurtz, Gaudin, Wordarski and Howing (1993) examined the school performance of 139 school aged children; 22 physically abused, 47 neglected, and 70 non-abused children, through school performance records and teacher interviews. They found that the physically abused children showed severe academic problems, and the academic performance of the neglected children showed academic delays in comparison to the non-abused children. This was supported by Kendall-Tackett and Eckenrode (1996) who, in a matched design of 324 abused children with 420 non-abused children in junior high school, found that the abused children had lower grades and more suspensions. Overall the children who had experienced both physical and sexual abuse showed the largest decline in academic performance. Further, research by Leiter and Johnson (1997), which detailed the maltreatment histories of 1,369 school aged children, found that there was a significant relationship between maltreatment and a decline in school performance. Moreover, deterioration or changes in school performance have been regularly cited as being one of the signs that a child may have suffered child abuse of some description

(Hobbs & Hanks, 1999), as this may be the only observable means of identifying children who have been maltreated.

Whilst none of these studies specifically focused on emotional abuse they do show a strong link between children's who have experiences of abuse and their subsequent performance in school. They raise the question, whether such a link exists with emotional abuse within a sports context.

Understanding the relationship between performance and mental state in sport has been primarily described through the Mental Health Model (MHM) proposed by Morgan in 1985 in which he considered the psychological health of an athlete or their psychopathology, and how they performed in a competitive sports context. Raglin (2001) undertook a major review of research that had been conducted using Morgan's MHM. He summarised:

The model postulates that as an athlete's mental health either worsens or improves performance should rise and fall accordingly, and there is now considerable evidence to support this view (Raglin, 2001 p. 875).

Morgan identified through his Profile of Mood States (POMS) six moods that were indicative of the mental health state of an athlete. These were; depression, anger, tension, fatigue, vigour and confusion. His model predicted that 'success in sport is inversely correlated with psychopathology' (1985, p. 71). He found that positive mental health, was characterised by his 'iceberg' profile, which depicted a pictorial model whereby depression, anger, tension, fatigue and confusion sat below the 'water line' and vigour stood above it between the other dimensions. This was a

dynamic entity subject to situational change. He found that intensive training such as that experienced by elite athletes, often resulted in mood disturbances and decrements to performance. As it is generally acknowledged that elite athletes train harder and longer than non-elite athletes (Donnelly, 1997) they might be more susceptible to performance declines. However, Morgan did report individuals who were successful despite the absence of positive mental health. (Although, the performance measures were external to the athlete, and therefore the athlete perception of their own performances was largely ignored.)

Since Morgan proposed the MHM there have been numerous studies that have examined its efficacy (e.g. Raglin, 2001), but it is not within the scope of this study to review them all. However, it is sufficient to say that his work opened up the possibility of a psychological link to performance which had previously been ignored. Nevertheless, the MHM does not indicate what the potential causes might be to disrupt an athletes mental health other than the intensity of their training.

Literature has frequently demonstrated firm links between an athlete's self-confidence and performance outcomes, indeed these links have been demonstrated showing that self efficacy is a strong predictor of performance, as stated by Moritz et al. in their meta-analysis of studies examining this relationship: 'This meta-analysis provides clear evidence for a significant relationship between self-efficacy and performance' (p. 289). Therefore how an athlete perceives their own performance

with respect to their efficacy beliefs would be a good indicator of actual performance.

Measuring Perceived Performance Effects

Data using this scale was collected at the same time, and with the same sample populations as Study Four. The measurement of perceived performance effects in this study was achieved through the Perceived Performance Effect (MPPE) scale on the SER-Q which asked athletes to report on how each coach's behaviour as detailed in each item on the SER-Q impacted on their perceived sporting performance both in training and competition. Thus it is measuring athlete's retrospective perceptions of their own performance in relation to their coaches behaviour, it must be stressed that it is not an actual measure of performance outcomes. It is this scale that will be the focus for this study.

Aims of the Study

This study breaks new ground as no previous study has looked at possible perceived performance sequelae following emotional response to reported coach behaviour. The aims of this study were to utilise scores on the Perceived Performance Effect (MPPE) scale on the SER-Q to investigate the following aspects; competitive level, athlete gender, type of sport and coach gender. Thus a number of specific questions arise that need to be considered:

1. What is the relationship between the scores on the Perceived Performance Effect scale (MPPE scores) and the MF scores and MER scores, and how might this contribute to the theoretical model?
2. Do athletes who competed at different levels report different MPPE scores?
3. Do males and females report different MPPE scores?
4. Is the type of sport that an athlete competed in, either team or individual, associated with differences in the reported MPPE scores?
5. Is the gender of the coach associated with differences in the reported MPPE scores?

Data Transformation

In order to address the aims of this study, and in accordance with the principles adopted in Study Four (see Chapter 6) the data transformation was undertaken as a means of simplifying the interpretation of the item scores on the Perceived Performance Effect scale on the SER-Q. This was achieved by creating a unique total score for each respondent on the Perceived Performance Effect scale. Thus, data from the Perceived Performance Effect scale from each item were combined and divided by 22 to create a Mean Perceived Performance Effect Score (MPPE score) for each respondent. The MPPE score has a range of 1 to 5, where 1 indicated athletes reporting a very negative effect, 3 indicated no effect and 5 indicated a very positive effect to the reported coach behaviour. Consequently, all further analysis will be undertaken using this new variable score such that it can be analysed with

respect to specific independent variables such as; competitive level, gender, type of sport and gender of the coach.

The data were initially analysed with respect to the dispersal and distribution of the data in order to establish which type of test, parametric or non- parametric, should be conducted on the data.

Table 7.1 *Descriptive Statistics for the Mean Perceived Performance Effect (MPPE) scores: in Relation to the Dispersal and Distribution of the Data*

n	Mean	Skewness		Kurtosis		Variance
		Statistic	Std Error	Statistic	Std Error	
543	2.96	-1.826	0.105	6.077	0.209	0.137

These results shown in Table 7.1 identify that there was an unacceptable level of skewness for the data to be considered normally distributed, where 0 indicates no skewness. Furthermore, the kurtosis was considerably greater than 3, and therefore the data cannot be considered to be normally distributed. Hence, in order to avoid making Type I errors, this data should be analysed using non-parametric statistics.

Method

Participants

As per Study Four (n=543)

Instruments

The 22 item SER-Q as per Study Three and Four (see Appendix B).

The Perceived Performance Effect scale was assessed in response to the question: *Consider how you think the behaviour affected your performance.* Each item was scored on a 5 pt Likert-type scale where 1 (*very negative effect*), 2 (*negative effect*), 3 (*no effect*), 4 (*positive effect*), and 5 (*very positive effect*). This scale was devised as ‘a central zero’ scale, with extremes of high and low on each side of the neutral response of ‘no effect’.

Procedure

As per Study Two and Study Three

Data Analysis

Each question, outlined in the aims of the study, was analysed using the following non-parametric statistical methods.

1. Spearman Ranked Correlations to test the relationships between the Mean Frequency (MF scores), Mean Emotional Response (MER scores) and Mean Perceived Performance Effect (MPPE scores).
2. Kruskal-Wallis test to investigate differences between the competitive levels of the athlete on the Performance variable- MPPE.
3. Mann-Whitney test to investigate differences between the genders of the athlete on the Performance variable-MPPE.
4. Mann-Whitney test to investigate differences between the type of sport, either team or individual on the Performance variable-MPPE.
5. Mann-Whitney test to investigate differences between the gender of the coach on the Performance variable-MPPE.

Results

Testing for relationships

The following section examines the relationships between the MPPE scores and the MF scores and MER scores.

Table 7.2 *Spearman Ranked Correlation Coefficients (ρ) between MPPE, MF and MER Scores, $n=543$*

	MF scores	MER scores	MPPE scores
MF scores	1.00	-0.750 *	-0.519 *
MER scores		1.00	0.751 *
MPPE scores			1.00

* Denotes significance $p < 0.01$

There was a negative relationship between MF scores and the MPPE scores when all the athletes were considered together ($n=543$) whereby high MF scores tended to be associated with low MPPE scores, and low MF scores tended to be associated with high MPPE scores, (see table 7.2). The relationship between MF scores and the MPPE scores when all the athletes were considered together ($n=543$) was statistically significant ($p<0.01$), (see table 7.2).

There was a positive relationship ($\rho =0.751$) between the MER scores and the MPPE scores when all athletes were considered together ($n=543$). Whereby high MER scores tended to be associated with high MPPE scores (see table 7.2). The relationship between the MER scores and the MPPE scores when all athletes were considered together ($n=543$) was statistically significant ($p<0.01$), (see table 7.2).

The relationships between MF scores and MER scores have been previously discussed (see Study Four)

Competitive Level

The following section examines the MPPE scores with respect to the competitive level that the athletes were competing at when they were children; recreational, club, regional, national and international.

Table 7.3 *Distribution of Total Percentages (%) of Responses to Perceived Performance Effect Categories: by Competitive Level*

	n	Very negative – Negative	Negative – Slightly negative	No effect	No effect – Slightly positive
Recreational	15	/	13.3 %	86.7 %	/
Club	78	1.3 %	25.6 %	71.8 %	1.3 %
Regional	227	0.4 %	25.2 %	74.4 %	/
National	132	3.8 %	48.5 %	47.7 %	/
International	91	12.1 %	37.4 %	50.5 %	/
<i>Total</i>	<i>543</i>	<i>3.52 %</i>	<i>30.0 %</i>	<i>66.22 %</i>	<i>0.26 %</i>

When athletes of all levels were considered together (n=543) the most frequently chosen questionnaire response (66.22%) was that the reported behaviour of their coaches had no effect on their sporting performances. This was more than twice as frequently chosen as the next highest category (30.0%), and that the reported behaviour of their coaches had had a ‘negative’ or ‘slightly negative’ affect on their sporting performances (see Table 7.3).

When the non-elite athletes (i.e. ‘recreational’, ‘club’ and ‘regional’ athletes) were considered alone (n=320), their responses were more extreme. For them the most frequently chosen questionnaire response (77.6%) was that the reported behaviour of their coaches had ‘no effect’ on their sporting performances. This was more than three-and-a half times (21.37%) more frequently chosen than the next highest category (21.37%) – that the reported behaviour of their coaches had had a

‘negative’ or ‘slightly negative’ effect on their sporting performances (see Table 7.3).

When elite athletes (i.e. ‘national’ and ‘international’ athletes) were considered alone (n=223), their responses were somewhat different. For them the most frequently chosen questionnaire response was still that the reported behaviour of their coaches had ‘no effect’ on their sporting performances, but this accounted for less than half of the responses (49.1%). The next most frequently chosen response – that the reported negative behaviour of their coaches had had a ‘negative’ or ‘slightly negative’ effect on their sporting performances, accounted for 42.95% of the groups responses (see Table 7.3).

When the ‘national’ level athletes were considered alone (n=132), their most frequently chosen questionnaire response - that the reported behaviour of their coaches had had a ‘negative’ or ‘slightly negative’ affect on their sporting performances, accounted for 48.5% of the group’s responses, (see Table 7.3).

When the ‘international’ level athletes were considered alone (n=91), their responses were distinctly different from all others. Although their most frequently chosen questionnaire response was that the reported behaviour of their coaches had had ‘no effect’ on their sporting performance (50.5%), and the next frequently chosen response- that the reported behaviour of their coaches had had a ‘negative’ or ‘slightly negative’ affect on their sporting performances, accounted for 37.4% of the

group. However, 12.1% chose the category of ‘negative’ or ‘very negative’. This was proportionally more than three-and-a-half times more than the mean for the athletes as a whole, and more than three times more than the ‘national’ athletes (see Table 7.3).

Table 7.4 Descriptive Statistics for the MPE Score: as a Function of the Competitive Level of the Athletes, n=543

Level	n	Median	Mean	SD	Min	Max
Recreational	15	3.04	3.13	0.240	2.32	3.18
Club	78	3.00	3.04	0.324	1.91	4.18
Regional	227	3.05	3.09	0.256	1.56	3.82
National	132	2.89	3.00	0.391	1.30	4.05
International	91	2.76	3.00	0.541	1.10	3.36

The mean MPPE scores for the five performance levels ranged from 2.76 (‘international’ athletes) to 3.05 (‘regional’ athletes), with the means of each of the elite groups (i.e. ‘national’ and ‘international’ athletes) being lower than each of the non-elite athletes (i.e. ‘recreational’, ‘club’ and ‘regional’ athletes). The elite groups had lower MPPE scores than did the non-elite groups (see Table 7.4)

The elite athletes demonstrated the greatest variability in the responses on their MPPE scores, as illustrated by the standard deviations, 0.391 for national athletes and 0.541 for international athletes.

In order to establish if the apparent differences shown in Table 7.4 were significant these were analysed using the Kruskal-Wallis test which compared the MPPE scores across the competitive levels. The dependant variable was the MPE score and the independent variable was the competitive level.

Table 7. 5 *Results from the Kruskal- Wallis Test for the MPE Score: Comparing the Competitive Level of the Athletes*

n	df	K	p
543	4	29.290	0.000 *

* Denotes significance where $p < 0.001$

The difference between the MPPE scores and the level at which the athletes competed was statistically significant ($p < 0.001$), (see table 7.5). In order to identify where the significant differences were with respect to each competitive level, post hoc Mann-Whitney U Tests were conducted.

The post hoc Mann-Whitney U Tests show that there were significant differences between all the non-elite athlete groups; recreational, club and regional, and the elite athlete groups; national and international (see table 7.6). Specifically; there was no statistically significant difference between the MPPE scores of the recreational-level ($n=15$) athletes and club-level ($n=78$) athletes ($p > 0.05$).

Table 7.6 Summary of Post Hoc analysis using Mann-Whitney U tests for MPPE scores reporting p values

	n	Recreational	Club	Regional	National	International
Recreational	15	/	0.108	0.336	0.048 *	0.015 *
Club	78		/	0.199	0.026	0.000 ***
Regional	227			/	.000 ***	0.000 ***
National	132				/	0.382
International	91					/
<i>Total</i>	<i>543</i>					

* Denotes significant difference between groups; $p < 0.05$

** Denotes significant difference between groups; $p < 0.01$

*** Denotes significant difference between groups; $p < 0.001$

There was no statistically significant difference between the MPPE scores of the recreational-level (n=15) athletes and regional-level (n=227) athletes ($p > 0.05$).

There was a statistically significant difference between the MPPE scores of the recreational-level (n=15) athletes and national-level (132) athletes ($p < 0.05$).

There was a statistically significant difference between the MPPE scores of the recreational-level (n=15) athletes and international-level (91) athletes ($p < 0.05$).

There was no statistical significant difference between the MPPE scores of club-level (n=78) athletes and regional-level (n=227) athletes ($p > 0.05$).

There was a statistically significant difference between the MPPE scores of the club-level (n=78) athletes and national-level (n=132) athletes ($p < 0.05$).

There was a statistically significant difference between the MPPE scores of the club-level (n=78) athletes and international-level (n=91) athletes ($p < 0.001$).

There was a statistically significant difference between the MPPE scores of the regional-level (n=227) athletes and national-level (n=132) athletes ($p < 0.001$).

There was a statistically significant difference between the MPPE scores of the regional-level (n=227) athletes and international-level (n=91) athletes ($p < 0.001$).

There was no statistically significant difference between the MPPE scores of the national-level (n=132) athletes and international-level (n=91) athletes ($p > 0.05$).

These results reveal that the differences between the international athletes and most of the non-elite groups were statistically the strongest of all, but there was no statistical difference between the two groups of elite athletes (i.e. the national-level and international-level athletes); and, generally, there were either no statistically significant differences between any of the non-elite groups, or the differences between them were statistically weaker than those with international athletes. These were, however, two anomalies. The differences between the international-level athletes and the recreational-level athletes, and the differences between the national-

level athletes and the regional-level athletes, showing that, when taken together, the MPPE scores showed a less-clear pattern than was seen previously with both the MF and MER scores.

It can be concluded, nevertheless, that there are significant differences between international-level athletes and non-elite athlete groups, albeit not all at $p=0.001$ level, in their reporting of a performance decrement following the reported emotionally abusive behaviour of their coaches and their reported emotional response to it.

Athlete Gender

The following section examines the MPPE scores with respect to the gender of the athlete.

Table 7.7 Distribution of Total Percentages (%) Responses to Perceived Performance Effect scale across all Categories: by Athlete Gender

Gender	N	Very Negative – Negative	Negative– Slightly Negative	No Effect	No Effect– Slightly Positive
Male	353	2.5 %	38.3 %	59.2 %	0%
Female	190	3.7 %	43.7 %	52.1 %	0.5 %

When male athletes were considered alone ($n=353$) the most frequently chosen questionnaire response (59.2%) was that the reported behaviour of their coaches had

‘no effect’ on their sporting performance. When female athletes were considered alone (n=190) the most frequently chosen questionnaire response (52.1%) was also that the reported behaviour of their coach had ‘no effect’ on their sporting performance.

Results showed that 38.3% of male athletes chose the questionnaire response of ‘negative/slightly negative’, and 2.5% chose the questionnaire response of ‘negative/very negative’. This compared with 43.7% of females athletes who chose the questionnaire response of ‘negative/slightly negative’ and 3.7% of female athletes who chose ‘negative/very negative’.

Table 7. 8 *Descriptive Statistics for the MPPE Score: Comparing the Gender of the Athletes*

Gender	n	Median	Mean	SD	Min	Max
Male	353	3.09	2.98	0.339	1.2	4.00
Female	190	3.04	2.92	0.421	1.1	4.18

The mean MPPE scores for males (2.98) and females (2.92) show only a slight difference between the two groups with the females reporting a lower mean value on their MPPE scores (see Table 7.8). To test whether this difference was statistically significant the data were analysed using a Mann-Whitney U Test.

Table 7.9 Mann-Whitney U Test for the MPPE scores: Comparing Athlete's Gender

n	MU	Z	p
543	30585.0	-1.700	0.089

The differences between the MPPE scores for male and female athletes was not significant; ($p=0.089$), at the 0.05 level (see Table 7.9).

Type of Sport

The following section examines the MPPE scores with respect to the type of sport, either team or individual, that the athletes were competing at when they were children.

Table 7.10 Distribution of Total Percentages (%) Perceived Performance Effect across all Categories: by Type of Sport

Sport	n	Very Negative – Negative	Negative– Slightly Negative	No Effect	No Effect- Slightly Positive
Team	349	4.6 %	42.8 %	52.1 %	0.5 %
Individual	194	2.6 %	38.1 %	59.0 %	0.3 %

When athletes from individual sports were considered alone ($n=194$) the most frequently chosen questionnaire response (52.1%) was that the reported behaviour of their coaches had 'no effect' on their sporting performance.

When athletes from team sports were considered alone (n=349) the most frequently chosen questionnaire response (59.0%) was also that the reported behaviour of their coach had ‘no effect’ on their sporting performance.

These results appear to suggest that the type of sport that an athlete competed in when they were a child did not influence their reported responses on the Perceived Performance Effect scale.

Table 7. 11 *Descriptive statistics for the Mean Perceived Performance Effect (MPPE) Score: Comparing Athletes’ Sports*

Sport	n	Median	Mean	SD	Min	Max
Team	349	3.04	3.00	0.320	1.30	4.18
Individual	194	3.04	2.89	0.439	1.10	4.05

The mean MPPE scores for team athletes (2.89) and individual athletes (3.00) show a slight difference between the two groups with the team athletes reporting a lower mean value on their MPPE scores (see Table 7.11).

The standard deviation (0.439) of the individual sport athletes shows that there was greater variation in the reported MPPE scores in this group in comparison to the team athletes (0.320), (see Table 7.11).

Furthermore, the calculated medians for both groups were identical. A Mann-Whitney U Test was conducted to test for significant differences between the two groups

Table 7.12 *Mann-Whitney U Test for the MPPE Score: Comparing Team and Individual Sport*

n	MU	Z	p
543	30664.0	-1.83	0.067

The differences between the MPPE scores for team and individual sport athletes was not significant ($p=0.067$), at the 0.05 level (see Table 7.9).

Coach Gender

The following section examines the MPPE scores with respect to the gender of the coach that the athletes were working with when they were children.

Table 7.13 *Distribution of Total Percentages (%) Responses to Perceived Performance Effect across all Categories: by Gender of the Coach*

Coach Gender	n	Very Negative – Negative	Negative – Slightly Negative	No Effect	No Effect- Slightly Positive
Male	436	3.4 %	39.0 %	57.4 %	0.2 %
Female	107	2.8 %	43.0 %	53.3 %	0.9 %

When male coaches were considered alone (n=436) the most frequently chosen questionnaire response (57.4%) was that the reported behaviour of their coaches had ‘no effect’ on their sporting performance. When female coaches were considered alone (n=107) the most frequently chosen questionnaire response (53.3%) was also that the reported behaviour of their coach had ‘no effect’ on their sporting performance.

Results showed that 39.0% of athletes with male coaches chose the questionnaire response of ‘negative/slightly negative’, and 3.4% chose the questionnaire response of ‘negative/very negative’. This compared with 43.0% of athletes with female coaches who chose the questionnaire response of ‘negative/slightly negative’ and 3.7% of female athletes who chose ‘negative/very negative’ (see Table 7.13).

Athletes with female coaches (0.9%) chose the questionnaire response of ‘no effect/slightly positive’, compared to 0.2% of athletes with male coaches who chose this response on the questionnaire, (see table 7.13).

Table 7.14 *Descriptive Statistics for the MPPE Score: Comparing the Gender of the Coach*

Coach Gender	n	Median	Mean	SD	Min	Max
Male	436	3.04	2.96	0.362	1.10	4.05
Female	107	3.04	2.94	0.404	1.18	4.18

The mean MPPE scores for athletes with male coaches (2.96) and athletes with female coaches (2.94) showed a small difference between the two groups with the athletes with female coaches reporting a lower mean value on their MPPE scores (see table 7.14). The standard deviation (0.404) for the athletes coached by women showed that there was greater variation in the reported MPPE scores in this group in comparison to the athletes who were coached by men (0.362), (see Table 7.14).

These results appear to show that the majority of athletes, regardless of the gender of their coach, reported similar MPPE scores. To check this assumption a Mann-Whitney test was conducted to test for significant differences between the two groups.

Table 7. 15 *Mann-Whitney U Test for the MPPE scores: Comparing the Gender of the Coach*

n	MU	Z	p
543	23012.0	-0.217	0.828

The differences between the MPPE scores for athletes with male and female coaches was not significant ($p=0.828$), at the 0.05 level (see Table 7.15).

Summary of the most significant results

7.1 The Mean Perceived Performance Effect score correlated negatively with the Mean Frequency score, this was correlation was significant at the 0.01 level.

- 7.2 The Mean Perceived Performance Effect score correlated positively with the Mean Emotional Response score, this correlation was significant at the 0.01 level.
- 7.3 Significant differences were found between elite athletes ('national' and 'international') and non-elite athletes ('recreational', 'club' and 'regional') on the variable; Mean Perceived Performance Effect score.
- 7.4 No significant differences were found between male and female athletes on the variable; Mean Perceived Performance Effect score.
- 7.5 No significant differences were found between team and individual athletes on the variable; Mean Perceived Performance Effect score.
- 7.6 No significant differences were found between athletes who were coached by men or women on the variable; Mean Perceived Performance Effect score.

Discussion

The results show that there was a significant relationship between the MPPE scores and both MF and MER scores. Thus, as the reported frequency of the negative coach behaviours increased so respondents reported a perceived increase in the negative effect on their performance ($\rho=0.519$, $p<0.01$). Furthermore, there was a significant positive relationship between the perceived performance effect score and the emotional response score ($\rho=0.751$, $p<0.01$) such that, as there was an increase in the negative emotional response, when there was an increase in the reported negative effect on performance. This finding supports the notion proposed by Morgan (1985) that there is an inverse relationship between performance and negative mental health, even if this relates to perceived and not actual performance. In this instance an athlete who reports experiencing a negative emotional response could be said to experience a disruption to their positive mental state. This finding also lends support to the findings from child maltreatment literature (Kendall-Tackett & Eckenrode, 1996; Kurtz and David, 1993; Leiter & Johnson, 1997) that there are performance consequences that arise following exposure to abusive behaviour, and that sports performance may be affected in a similar manner. These findings further support Stirling and Kerr (2007) who implied that the emotional effect of the coach behaviour is linked to the athlete perceptions of their own performance. Thus, there is a relationship between perceived performance and emotional response.

The second aim of the study was the consideration of the MPPE scores in relation to the competitive level that an athlete had competed in as a child. The results showed

that the athletes who competed at an elite level when children, i.e. the 'international' and 'national' level, reported the greatest negative perceived performance effects which were significantly different from the non-elite groups of athletes. An explanation for this finding could be associated with the athletic identity that athletes competing at an elite level have, which is directly related to their perceptions of themselves; this, in turn, has been shown to be closely related to their perceived performance outcomes (Jones et al., 2005, Stirling & Kerr, 2007). Therefore, their sporting performance assumes a greater significance to elite athletes. This may be a contributing factor in the differences found in this study. Furthermore, when these results are considered in relation to the findings from Study Four, it was the International athletes that reported experiencing the most negative emotional response, consequently, given that there is a significant relationship between the two, one might expect this result to have occurred.

In sport the performance outcomes have always been seen to be important. Indeed, as Lyle (1999 p.6) stated the aim of coaching 'is to achieve the best possible performance'. Therefore, the more elite the sporting context, the greater the emphasis put on performance outcomes (Ryan, 1995). Furthermore, it is especially important to consider the individual perceptions about performance effects, which the MPPE scores do, rather than simply relying on external measures of performance, as it is these that an athlete will use to judge their own performance successes or failures. Thus, these findings give an insight into the athletes'

retrospective assessment of their own performance in relation to their coaches' behaviour.

Other findings of this study are that the gender of the athlete was not a significant factor in the reported MPPE scores, and no significant differences were found between male and female athletes. Furthermore, the type of sport that an athlete competed in was not reflected in the reported MPPE scores, such that no significant differences were found between athletes who competed in individual sports and those who competed in team sports. Lastly, the findings revealed no significant differences between athletes who were coached by men and who were coached by women in the reported MPPE scores. These results are similar to the findings found in Study Four with respect to Frequency and Emotional Response.

Overall, these findings suggest that the perceived performance effect is an important element in fully understanding the consequences of negative coach behaviour, and the athletes' emotional response to it. The reported perceived performance scores may be not be directly 'observable' or 'quantifiable' outcomes of performance but provide an important insight into the athletes understanding of themselves and their performance capabilities which is a critical factor within sport. Therefore including this adds a new critical element that strengthens the model and its possible application within a sport context.

Implications for the model

The findings show that there is now the added dimension of the perceived performance effect to consider in relation to the frequency of negative coach behaviour, emotional response and emotional problem symptoms. This is needed in order to fully understand the process within a sports context and therefore the model needs to be adapted to reflect this. The added dimension strengthens the model by incorporating the sport specific element, that of perceived performance, into the model which differentiates it from other contexts where emotional abuse may exist, such as a family context, where performance outcomes would not be considered in the same way. Furthermore, if we consider the model in the relation to the Mental Health Model (Morgan, 1985), there are aspects that would appear to support the link between the two.

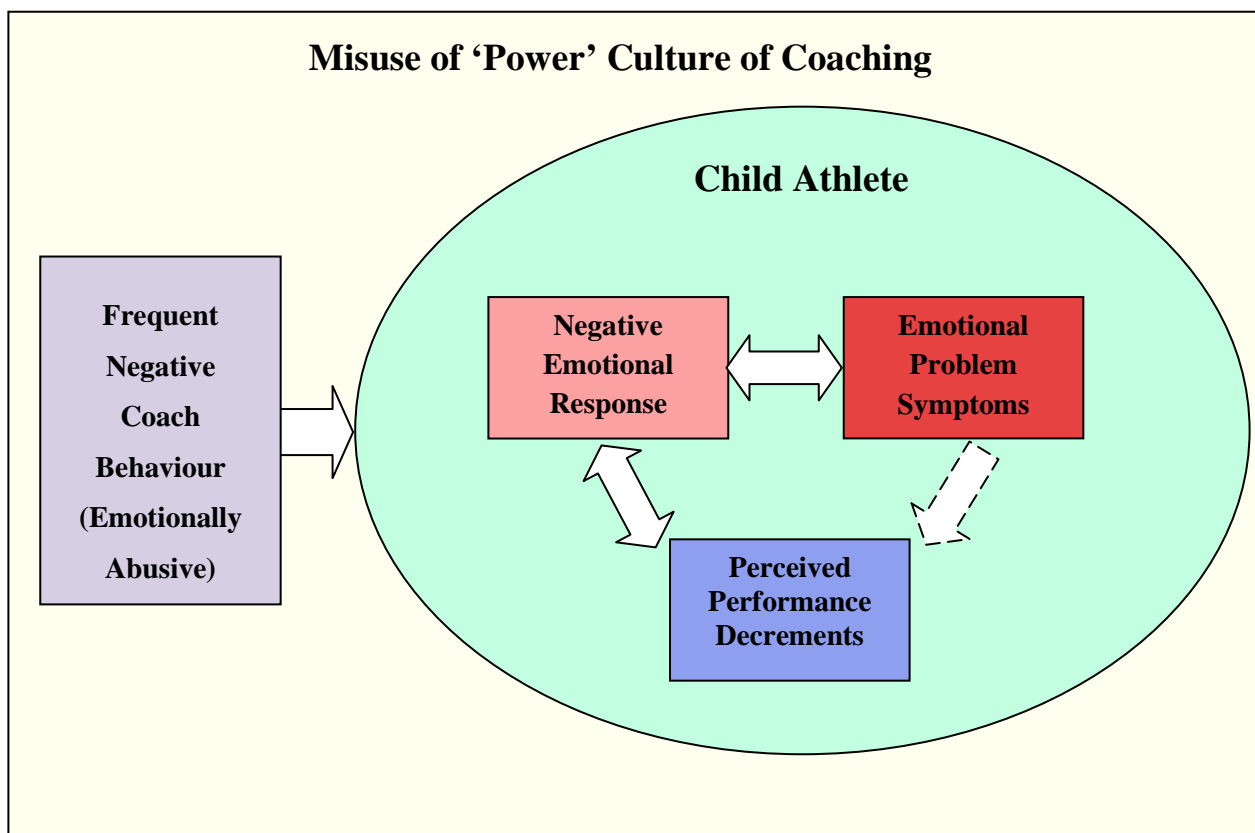


Figure 7.1 Theoretical Model 3; Adapted to include the Perceived Performance Effects

Implications for the Questionnaire

The findings have demonstrated the validity of the Perceived Performance Effect scale as part of the SER-Q; therefore this scale will now be included in the final SER-Q.

Chapter Eight

Final Discussion

This research has been a series of linked studies which sought to investigate the emotional responses of child athletes to their coach's behaviour using theoretical frameworks from the world of child maltreatment. The research has endeavoured to broaden the discussion about the treatment of children to include child athletes and develop, through a range of methodologies, an insight and understanding into the perspectives of their own sporting experiences. In so doing this work offers new and unique applications of theory from both sport and family contexts and, by this means, forges new connections and synergies where previously they did not exist. It is through this process that we can examine the data from this research and create new theoretical perspectives which may enhance the understanding of the experiences of child athletes.

At the outset of this research process several questions were raised which became the focus of this research. These questions were largely anchored in my personal experiences from elite sport, but they became the driving force behind the development of the studies. It is important to reconsider the original research questions in order to reflect on them in the light of the new knowledge generated from the studies. These were, retrospectively:

Do child athletes experience negative coaching behaviour from their coaches?

What is the perceived impact of negative coach behaviour on child athletes?

What knowledge and understanding exists outside of sport that can be utilised to help to unravel the experiences of these child athletes?

Are there parallels that can be drawn from abusive parent-child relationships that would help to understand the nature of these coach-child athlete relationships?

How widespread are the child athlete experiences that I have witnessed?

Or is it that my experiences were isolated instances and are not representative of what happens in elite child sport or indeed other levels of competitive sport?

In terms of the links between theory and the applied findings from this research, the findings do not directly support one or more of the theories outlined in Chapter Two. Notwithstanding, it is worth considering the potential for each of the theories (Family Structure, Strain Theory, Social Bonding Theory and Attachment Theory) to make a contribution to the field in future research; however, it must be stressed that this discussion should be viewed as speculative at best as it was not the aim of this research to explicitly explore the role of those theoretical perspectives, rather to develop a psychometrically robust measure. In addition, the viewpoint underpinning many of these theories is generally one that considers the perpetrator's actions and their effects rather than the recipient's reactions and their potential causes. This research differs from that approach in that it only considers the child athlete perspective. While a coach may not view her/his actions as abusive, the reactions of the athlete, her/his reported discomfort and the impact on perceived performance is

of paramount importance. Having said that, at this early stage in the development of research into the well-being of elite child athletes any conclusions drawn should be considered tentative at best.

Evidence from Study One could be seen to be providing some support for Family Structure Theory. Athletes' reports of their childhood experiences strongly suggest that the 'power' within the relationship is firmly in the hands of their coaches. Thus, training methods were legitimised and accepted as the 'norm'. The athletes reported numerous examples of controlling behaviour, which they were not able to challenge. Thus, it would seem plausible that this theory has some validity in providing an explanation for coaches' behaviour within a sport context, where in many respects they assume a position of power akin to that of a parent or primary caregiver. However, the findings from Studies Two, Three and Four would indicate that this might not be the case for children who were involved in sport at recreational, club and regional levels. Therefore, future research needs to explore why this is the case, and consider the applicability of this theory in contexts other than elite sports. Indeed, findings across all the studies did not provide any insights to suggest the applicability of Strain Theory as an explanation for the response of athletes to their coaches' behaviour.

Similarly, at first glance, there would not appear to be any significant mileage in framing this research around Social Bonding Theory. That is not to say that this theory or indeed Strain theory does not have merit, it is rather that the research

questions asked in this study do not lend themselves to this theoretical perspective. However, it may be the case that future research using the SER-Q could provide a better understanding of the potential for Strain Theory or Social Bonding Theory when used in conjunction with other relationship measures.

Overall, Attachment Theory seemed to provide a more robust explanation for the findings primarily because it considers the effects of abuse and neglect from the child's perspective (Bacon & Richardson, 2001). The elite athletes from Study One described what seemed to be 'internal working models' (Bowlby, 1969) of diminished self-worth and insecurity, not just within a sport context, but as a general description of themselves. These athletes anchored their emotional responses in their experiences of being coached and, consequently one could hypothesise that the nature of their relationship with their coaches was similar to those attachment styles observed in parent-child interactions. The exact nature of the attachment style demonstrated by athletes and their coaches needs further exploration; however it would seem that there are benefits in seeking to establish relationships that are secure rather than insecure.

Given that this research did not ask questions that were focused on attachment theory per se, it is difficult to specifically identify which type of attachment the athletes may have experienced from the relationship that they had with their coach. However, there was some evidence to suggest that some athletes may have experienced avoidant-insecure attachments with their coaches. One of the

identifiable features of avoidant-insecure attachment is emotional withdrawal, and an inability to express their feelings. For example, one athlete stated, “I was very scared; it made me go within myself” (see Table 3.3) or another who said, “it made me really withdrawn” (see Table 3.5) these are consistent with this particular attachment style.

There was also evidence from Study One of athletes expressing low self confidence and low self worth. For example, one athlete reported “Inadequate, useless, just a total loss of self esteem... I thought I was useless at everything” (see Table 3.1). These emotional responses would also appear to be indicative of an ambivalent-insecure attachment between athlete and coach. However, care must be taken not to over simplify these responses and project apparently dysfunctional behaviour onto coaches without having the evidence to support the classification of a particular attachment style. Thus, it is only possible to speculate on the nature of coach-athlete relationships within samples. What is clear, from the evidence produced in Study One, is that the athletes indicated that there were emotional consequences resulting from their relationships with their coaches. The data indicates a consistency between these responses and the emotional consequences described by Attachment Theory as a result of insecure attachments with significant adults. But there is not enough evidence to overwhelming support this theory, thus it can only be speculation. In order to fully explore the coach-child athlete relationship from an Attachment Theory perspective a different approach would need to be taken in order to collect more robust data that explicitly focuses on this.

Overall, through the process of this research evidence has been collected that moves towards providing answers to these questions. This discussion will consider these and, other questions that emerged through the research, by reviewing the findings across all the studies. First, this final discussion will draw attention to the unique and original features of the research with respect to; methodologies, instrumentation and application of theory. Secondly, this discussion will focus attention on the key findings that have emerged across all the studies, and relate them back to the original review of literature and research questions.

This research has deliberately used both qualitative and quantitative methodologies in order to investigate the research question from different perspectives. By adopting this approach it has enabled different types of knowledge to be generated which was both in-depth through the interviews, and broad through the questionnaires. Through sampling different types of data it has facilitated a closer examination of the phenomenon from different perspectives allowing comparisons and links to be made. Overall this approach has strengthened the research process and provided a rich data source from which to draw conclusions.

The instrument (the SER-Q) used in this research was primarily created in order to be able to gain data from a broader population. However, the design and construction has some unique features which should be highlighted. Firstly, the athletes responding to the questionnaire considered each item in such a way that allowed a sequential response to three scales. Thus, athletes made the links between

the scales by considering: 'how it made them feel' and 'how it affected their performance' with respect to each statement about their coaches behaviour. In so doing, the data generated represent the connection between the scales which offers a unique perspective into their reported experiences. Secondly, the SER-Q is rooted in eliciting data that reflect the athlete's emotional response to their coach's behaviour. This adds a new dimension to current instruments measuring emotional abuse which only explore the frequency element, and ignore the resultant feelings of the respondent. This addition is important because, rather than simply reporting whether they had or had not experienced the behaviour and then making judgements about whether or not a respondent had been emotionally abused the SER-Q enables the question to be asked about how it made them feel. This then functions as an emotional barometer which provides greater insight into their experiences rather than just considering the adult behaviour in isolation, it is the perceived interaction between the adult behaviour and the emotional response of the recipient that becomes critical. Another original feature of the questionnaire was that it was constructed directly from the reported experiences of child athletes and, as such, provides a unique perspective whereby they are the 'experts' on their own experiences of emotionally abusive coach behaviour. This then offers the SER-Q another strength, that of directly reflecting the athlete perspective. Lastly, through the SER-Q, it was possible to subject the new theoretical approach to rigorous quantitative analysis, thus strengthening the research process.

As has been previously stated, this research has used theory from child maltreatment literature as its foundation. It has recognised that it was here that the knowledge and understanding of emotional abuse was most advanced and best understood. Specifically focused research into emotional abuse and emotional response within a sports context previously did not exist and, consequently, there was no work from which to draw upon as a starting point. However, studies within sport which have examined the behaviour of coaches have been utilised, as they had a resonance and relevance even if not specifically addressing the issue of emotional abuse. This research has entered previously uncharted waters by drawing on research on emotional abuse within a family context and applying it to a sports context. This culminated in the creation of an original concept map which sought to combine key theories in a new way.

The concept map therefore became the basis for all of the studies, not only underpinning the particular research question posed by each individual study, but also providing the framework for the entirety of this work. It was from the concept map that the theoretical model was able to be generated, and shaped throughout the research. Thus, in essence, this research rests on two levels; the data and results generated from each study, and the process of theoretical modelling that took place alongside, driven by the results. The main emergent results from all of the studies are discussed in relation to previous work, and their significance within the sports context.

The starting point for the research was an investigation of elite athlete's experiences through in-depth interviews in Study One. The concept map provided the framework for the interviews and data was generated in accordance with it. The results from this study identified some significant issues and emergent questions which drove the investigation in subsequent studies.

First, the results showed that all of the elite athletes had experienced some emotionally abusive behaviour as defined by Garbarino et al's. (1986). They provided evidence robust enough to support the application of theories from child maltreatment literature into a sports context. Furthermore, the evidence from the interviews identified that this behaviour was frequently experienced when they were elite child athletes providing support for O'Hagan's notion that emotionally abusive behaviour has to be 'sustained and repetitive' (1993, p. 456).

When data were drawn from larger populations and subjected to rigorous statistical analysis, as in Study Four, this finding with respect to elite athletes was replicated. Indeed, it was only elite athletes who reported having frequently experienced emotionally abusive behaviour from their coaches. When these results were compared to the other competitive levels (recreational-level, club-level and regional-level), there was a significant difference between these athletes and the elite athletes. Furthermore, the results showed that the international-level athletes experienced even more emotionally abusive behaviour and more negative emotional response to it than elite national-level athletes.

These results directly support the work of Stirling and Kerr (2008) who found evidence of elite swimmers experiencing frequent emotionally abusive behaviour from their coaches. The consistency of these results both from qualitative data and quantitative data suggest that the elite child athlete experience is different from that of children competing at lower levels. Further evidence of these differential experiences was found in the results from Study One which showed that all of the athletes reported a negative change in their coaches' behaviour once they had become identified as elite. Whilst it is acknowledged that the work of Ryan (1995) was not research per se, it would still support the observations she made when she described the lives of elite skaters and gymnasts as being one where they were disempowered and constantly subjected to verbal abuse from their coaches. It is also in alignment with a number of studies which have examined the experiences of elite child athletes (Brackenridge, 1997; Burke, 2001; Cushion et al., 2006, Donnelly, 1993; Kiani, 2005) all of which found that the coach exerted extreme power and control over the child athletes. Reinforcement of this was further found in Study One from the reported descriptions of the misuse of 'power' by the coaches: indeed, one athlete went as far as to say they felt their coach was a 'power maniac' (see Table 3.9).

The relationship between the frequency of the emotionally abusive behaviour reported and the emotional response to it is an important finding that needs careful consideration. In all studies the greater the reported frequency the greater the

negative emotional response reported. These results support the work of such research as: Garbarino et al's. (1986); Navarre (1987); Brassard and Hart (1987); O'Hagan (1993); Bingelli et al. (2001) to name the most influential, who identified the negative emotional impact that seemingly 'neutral' behaviour by significant adults can have on children, and the residual effects that it can have on the well being of the child. The evidence from child maltreatment literature, suggests that the effects of emotional abuse have a residual and long lasting effect (Bingelli et al., 2001; Navarre, 1987), and have been found to cause a range of emotional problems lasting into adulthood (Bingelli et al., 1987; Garbarino et al's., 1986; Navarre, 1987). Indeed the impact of emotional abuse has been found to leave more damaging psychological scars than other types of abuse (Bifulco et al., 2002). This research has also found that athletes also reported residual emotional effects from their experiences of being coached as a child. This was succinctly put by one athlete who said; 'I think being humiliated is so horrible and the pain of that I think I will always remember'

All of the athletes in Study One reported some emotional problem symptoms as a direct result of their coaches' behaviour. These included diminished feelings of self-worth, low self-esteem, and withdrawal to name a few. These reported responses are similar to those of children who have been emotionally abused by their parents (Bingelli et al., 2001; Gracia, 1995; McGee et al., 1997; Mullen et al. 1996). This provides further support for the notion that the coach-child athlete relationship has

similarities to that of parent-child relationships. It is therefore appropriate to utilise theories from child maltreatment in a sports context.

A second consideration of the relationship between the reported frequency of emotionally abusive behaviour and the reported emotional response was that, overall, the results showed that the majority of athletes did not experience any emotionally abusive behaviour from their coaches, nor did they report any negative emotional responses. Indeed, this was found to be the case across all of the studies. This result is consistent with prevalence data produced by Cawson et al. (2000) who, in the most extensive study of childhood abuse in the UK to date, among a population of young adults (aged 18-24) only 6% of the population reported having experienced emotional abuse from their carers when they were children. It is therefore interesting to note that the 8% who reported experiencing emotionally abusive behaviour from their coach mirrors the prevalence rate of emotional abuse in parent-child relationships.

This finding illustrates the ability of the SER-Q to distinguish between those athletes who reported never having experienced emotionally abusive behaviour from their coach, and those who believed they had. As Herrenkohl (2005) suggested, it is important that any measure of emotional abuse should have the ability to differentiate between these two populations.

The results from all the studies found that there were no differences between male and female athletes and their reporting of emotionally abusive behaviours, emotional responses and perceived performance effects. This would largely support the findings of Cawson et al. (2000) who found no evidence of statistically different experiences between males and females with respect to their reported experiences of emotional abuse from parents and carers. It would further suggest that, whilst the research to date which has reported females experiencing emotional abuse (Jones et al., 2006; Ryan, 1996; Stirling & Kerr, 2007), it would be misleading to suggest that it is only female athletes who experience this.

Another consistent result across all the studies was that the type of sport that an athlete is involved with, be it an individual or team based sport, is not a factor in their reporting of having experienced emotionally abusive behaviour from their coach. Thus, it does not appear to be the cultural context of the sport, which may differ from team to individual sports, which determines a child athlete's experiences of being coached.

The results across all studies found no differences between athletes who were coached by men or who were coached by women. This would suggest that the gender of the coach is not a factor in determining the perceptions of reported emotionally abusive behaviour, negative emotional responses and performance detriments. Moreover, it would support the work of Stirling and Kerr (2007; 2008) who also found this to be the case with elite swimmers, all of whom in their study

(n=14) reported examples of experiencing emotionally abusive behaviour from both male and female coaches. These results would also align well with evidence from the child maltreatment literature which has found that parents of both sexes were equally as likely to be the perpetrators of emotional abuse (Cawson et al., 2000).

The results found with respect to perceived performance effect showed that there was a significant negative relationship with frequency of reported behaviour, and a positive relationship between emotional response and performance effect such that the more negative the reported emotional response the greater the perceived detriments to their performance were also reported. This finding appears to be consistent with Kendall-Tackett and Eckenrode (1996) and, Leiter and Johnson (1997), who found that the school performance of abused children also deteriorated, even though no actual sporting performances were directly measured in this study. Whilst sport and academic performance domains might not be equivalent, the fact that the trend is replicated in sport is useful to acknowledge and could apply to other performance domains, such as music or dance. In some cases deterioration or changes in performance may be the only observable means of identifying children who have been emotionally abused. So in a similar way school environment performance changes/deteriorations have been regularly cited as being one of the alert signals for teachers, so too should it be for child athletes (Hobbs & Hanks, 1999). Furthermore, the results indicated that it was the elite athletes who reported the most negative effect on their perceived performance. This was further supported by evidence from Study One which found that even though these were elite athletes

competing in international competitions, when they reported on their own performances they were described as being inadequate.

From all of the results some clear broad findings emerge that are consistent across all the studies. These can be summarised as follows:

1. The application of theoretical perspectives generated to explore the relationships between parent and child has relevance and resonance in contributing to further the understanding of coach-child athlete relationships from the athlete perspective.
2. Only those who were elite child athletes reported frequently experiencing emotionally abusive behaviour from their coaches.
3. Only those who were elite child athletes reported negative emotional responses and negative perceived performance effects in relation to the coaching behaviour they received.
4. The majority of athletes reported experiencing no emotionally abusive behaviour from their coaches when they were child athletes, and no negative emotional responses or performance detriments.
5. Overall results from all studies supported the theoretical model generated through the research process.

Limitations

An important overarching limitation that must be acknowledged is the retrospective nature of this research. All athletes were retrospectively reporting on experiences that they had when they were children and the timescale of reflection was quite

broad with athletes looking back over time-scales that ranged from 3 to 15 years. So any findings must be considered within the potential fallibility of memory which might have clouded their recollections. It must also be acknowledged that the state of mind of the respondents at the time of the investigation may influence how they answered the SER-Q. Therefore, if a respondent was in a current state of depression or happiness their recollections of their past life experiences may be perceived differently.

Furthermore the design of the study asked for respondents to consider the time when they were competing at their highest level. In so doing their experiences are not simply a snap-shot of a particular time but reflect events spanning a number of years. This may have potentially impacted on the validity of the data collected. Nevertheless throughout all of the studies reliability of the data was statistically checked through split-half analysis, Cronbach α and replication studies. All of these methods revealed a very strong (i.e. highly significant) reliability providing support for the robustness of the design.

Study One: The small number of participants ($n = 12$) make the study very limited in its application. It is always unsafe and unwise to attempt to generalise the results from a small sample to a larger population. This study, therefore, is limited by its small numbers and by the fact that the sample was drawn from the London area, and it cannot be assumed that athletes from elsewhere would respond in a similar way. The participants also looked back on average almost ten years and so their results

refer only to that span of years that they were reflecting upon. These limitations are the main reasons for conducting studies two and three.

Nevertheless, the twelve athletes' responses were very similar but were drawn from 35 different sports, which suggest that the experiences may be generalisable to a broad range of sports. Similarly, the athletes, although based in London, were part of the World Class Performance Plans of their sports, and those who competed at national level travelled the country in their training and competition and so were exposed to a much wider range of experiences than London alone. Those in international squads were exposed to influences outside Britain. Indeed, it is unlikely that all of their coaches were trained in London or were Londoners, or even Britons. This suggests that the experiences that the athletes reported were not a local London phenomenon, but were indicative of something much more widely spread. (see Appendix D) The timescale of reflection was also quite broad with athletes looking back over time-scales that ranged from 3 to 15 years. Once again this suggests that their experiences are not simply a snap-shot of a particular time but reflect events spanning a number of years. These possible delimitations are however, offset by the small sample size and this must be remedied before any attempt is made to generalise the results from Study One to a larger or broader population.

The results in Study 1 must be interpreted within the framework of the limitations and possible delimitations listed in the two paragraphs above.

Study Two. The results of this study are exploratory, and emerge from the process of creating and validating the questionnaire, and so it would not be wise to generalise the results beyond the 229 participants in it. Although these subjects were attending a Department of Sport Sciences in a university in the west of London, they were not exclusively a London-based sample. They were drawn from all areas of the UK and even beyond and were reflecting on their performances when they were child athletes, and so, before they attended university. Their responses, therefore, are representative of the clubs and sporting experiences they had in various parts of the country from which they came. The results, therefore, although limited to these 229 participants, represent a much broader geographical distribution than the west of London alone.

Study Two: produced results that, in some cases supported or were consistent with those obtained in Study One. When this occurred it demonstrated that it was possible to obtain results by questionnaire that were consistent or supportive of the results obtained by interview techniques. Thus, these results were not specific to the methodology employed and suggest that to the extent that results from the two methodologies agree, they should not be seen as research-technique specific.

As Study Two was conducted two years after Study One, the findings demonstrate that the results were consistent over that period and not a phenomenon applicable only to the participants in Study One. Furthermore, the findings showed that the

findings were not dependant on the specific times and places where Study One participants received their childhood elite coaching experiences. This would suggest that the observed phenomenon is broadly based.

Study Three: The results from Study Three strongly supported those from Study Two. So much so that it was decided that they could be considered as two samples drawn from the same population. This seems to remove some of the limitations of interpretation that were present in Study Two. From Study Three it was found that another group of 314 students sampled two years after those in Study 2, produced very similar results. Therefore, the original results from Study Two were not limited to that sample alone, but were equally applicable to a similar sample two years later.

As with Study Two, participants reflected on experiences before they came to the university and so represent the geographical spread of their home locations. This seems to confirm that their results represent a pattern that was present in various parts of the UK (see Appendix D).

In Studies Four, Five and Six the two samples from Studies Two and Three were pooled. These 543 athletes reported on experiences widely distributed throughout the UK. As with Study 1, those who were national-level as child athletes ($n = 227$) will have travelled significant distances from their homes and experienced a sporting culture that was not limited to their home town. Those who were international child

athletes (n = 91) travelled even more extensively, at home and abroad. Thus, their experiences were not limited by their west London university experiences. They represent a much more widely distributed national and international experience.

Many of the results from Study One are supported by or are consistent with those of Studies Two to Six. Where this is the case it demonstrates that these experiences reported by elite child athletes are not confined to one research methodology, one period of time, or one location. The results show that subjects from many parts of the UK, and from many sports, and over a period of several years, consistently report very similar experiences and very similar sequelae.

The results of the non-elite groups, however, are limited by being applicable to studies 2 to 6 only, and were only obtained by questionnaire responses and from two samples of university students, and cannot be generalised beyond the limits imposed by those studies.

Results, of course, cannot be generalised to other populations in any circumstances without obtaining further research results to justify such generalisations, nevertheless, within the limitations and delimitations discussed above it may be possible to tentatively look for some broader overarching summarising statements that can be drawn from the 137 results listed above. I will call these 'findings' to distinguish them from the more detailed and precise 'results'.

It must be stressed however, that these ‘findings’ must be interpreted within the framework of the limitations and delimitations listed above and be viewed as an attempt to extract overarching generalisations from the 137 separate results each of which is more precisely worded. More complete and more precise wording is to be found in the appropriate results. The results which support these generalised ‘findings’ are listed below each statement of a finding.

Implications for policy and coaching practice.

Taking into account the limitations of this research, the overwhelming findings from this research have identified that the elite child athletes reported experiences that were significantly different from child athletes who were participating at lower levels. Within the context of child protection policy the findings would suggest that the coaching practices of elite coaches working with children need closer monitoring and scrutiny than coaches working at lower levels. Whilst it is acknowledged that this research did not measure any actual coaching behaviour the perceptions of the coaching behaviour and resultant emotional responses reported by the elite child athletes warrants specific consideration within current National Governing Bodies of sport; both with respect to ensuring the wellbeing of their elite child athletes and also in the education of the coaches working with child athletes at this level. To date within current coach education packages there is little focus on the impact of coaching practices on the emotional wellbeing of the child athlete; rather the emphasis is on the ensuring that coaches are equipped with the technical knowledge of the sport. Indeed many coach education programmes are designed around the

needs of adults not children, whereby coaching competency is determined by the coach's ability to coach adults. Thus understanding the emotional needs of children within a sports context has largely been ignored. Consequently coaches are gaining qualifications that do not fully equip them to work effectively with children, and as such it may not be surprising that coaching methods used treat child athletes as mini adults.

Whilst there have been huge forward strides taken in the UK to develop mandatory child protection policies within sport, often the focus of the child protection education programmes is on what the coach should do to ensure that they are not compromising themselves (Doran, 2004), rather than on the impact of their coaching methods on the well being of the child. A shift in emphasis that enables coaches to understand the child perspective would be recommended in response to the findings from this research.

Current UK funding practices of elite sport through World Class Performance programmes are such that funding is only given to a sport or athlete, if they demonstrate that they are able to 'medal' at international competitions. This has served to further drive forward a 'win at all costs' approach in the current climate. Little concern is shown for the methods used to achieve these ends, and no monitoring of the emotional well being of elite children engaged in World Class Performance programmes is undertaken. The findings of this study suggest that there is a case to regularly monitor the psychological and emotional well being of these

athletes with professional psychologists. These elite athletes are already subjected to extensive physical testing and evaluation, but there appears to be little concern for their mental health and no regular monitoring of it. Furthermore, coaches who receive funding through this programme should also be regularly monitored and evaluated by trained personnel to ensure the emotional and psychological ‘safety’ of their coaching methods. Coaches who are found to employ methods that have been identified in this study as emotionally abusive should be mandated to attend re-training to ensure that they do not employ damaging methods in the future.

Future Research

The 22-item SER-Q is a tool that can in future be used to examine the issue of potential emotional abuse in the coaching of child athletes, and for collecting more data which could lead to a re-evaluation of some traditional coaching behaviour. Use of the SER-Q also may enable researchers to examine the experiences of different athletes in different sporting contexts. Questions around the accepted culture of coach behaviour in different sports can be explored; moreover the findings from this work that indicate that coach behaviour changes when their athletes become elite would suggest that elite athletes might be more vulnerable to experiencing emotional problems as a consequence of their experiences of being coached whilst child athletes. Further work is needed in this area to ensure the safeguarding of these young people. This could also be examined through the use of the SER-Q.

An area that needs more examination is a greater understanding of the emotional problem symptoms that some ex-athletes develop to see if they are rooted in childhood experiences. Further work that correlates measures of these emotional problems, such as the Beck Depression Inventory, with the SER-Q might be fruitful in helping promote better support systems for ex-athletes, and create better awareness and responsibility in sport.

The findings from the previous studies raise some interesting and challenging questions about the potential future use of the SER-Q which might not be immediately obvious. The theoretical model predicts that the more frequently a child athlete experiences emotionally abusive behaviour from their coaches, the greater the negative emotional response and perceived performance decrements, which in turn may lead to the development of emotional problems. Therefore, it is the combination of both the frequency element and the emotional response on the SER-Q that enables a better understanding of the athlete experience. If one were to consider each scale in isolation it might give a false impression and thus be misleading. So for example if one just examined the MF score it might indicate that an athlete did frequently experience negative coaching from their coach and one might conclude that they had indeed been emotionally abused. However, if the same athlete recorded a MER score indicating that the behaviour of their coach had a positive emotional effect on them, the first conclusion made would have been incorrect. Thus it is the combination of these two variables, MF and MER that must

be considered together in order to be able to fully understand the child athlete experiences, and draw meaningful conclusions from them.

The theoretical model as it currently stands identifies the separate elements of: frequency, negative emotional response, leading to emotional problems. However, there may be a gap in this model because the relationship between frequency and negative emotional response is not represented. This relationship might be important for identifying a stage that precedes the development of emotional problems; that of emotional vulnerability (which in essence is a measure of potential risk). It would be consistent with the theoretical base of the studies (Garbarino, 1986; Bingelli et al., 2001) that if a child experiences more exposure to emotionally abusive behaviour they will be at greater risk of exhibiting emotional problem symptoms.

The key aspect in the process is not the behaviour of the adult per se, but rather how that behaviour makes a child feel. It is this important variable that is measured by the SER-Q and when considered in combination with the frequency might give greater insights into individuals who might be at greater risk of developing emotional problems later on, even as adults. Thus future research could ask new questions of the data and consider how the SER-Q could be used from an individual perspective, rather than a sample population perspective as has previously been done, to reconsider the potential use of the SER-Q.

Thus the relationship between these two elements; frequency and negative emotional response, might be critical in potentially identifying which child athletes might be 'at risk' of developing emotional problems, and who might need some therapeutic support. The question is can the SER-Q be used as a means of assisting in the diagnostic process? In attempting to answer this question there is recognition that this may be viewed as a departure from previous studies, however, it warrants attention as the SER-Q may have a valuable contribution to make.

In summary and with respect to the findings from this research these are the key factors that emerge as being the next important research steps to take:

1. To explore further those athletes who recorded high MF scores and low MER scores in relation to their emotional health history.
2. Implement further studies that correlate the SER-Q with other measures validated of emotional health.
3. To follow up athletes who have already been identified as experiencing emotional/ psychological health issues and administer the SER-Q to them as a means of investigating causalities
4. To gather more data from different athlete groups specifically non-student populations.
5. To use the framework of the SER-Q to examine coaches attitudes towards acceptable coaching behaviour as a means of identifying if elite coaches perceive acceptable behaviour differently to non-elite coaches.

6. To explore cultural differences through the use of the SER-Q, by investigating athlete populations from different countries to see if these findings are replicated in other populations
7. To explore the theoretical model with other groups of high achieving children such as musicians, dancers and mathematicians to name a few.

Final Conclusions

Although child protection is now high on the agenda within many coach education programmes, there is still little research to help inform practice (Brackenridge et al., 2005). As has been previously mentioned, without data it is impossible to implement policy and change practice in any meaningful way. However, future research utilizing the SER-Q may help access young athlete's experiences and contribute to a better understanding of the child athlete-coach relationship from the athlete perspective. The present study challenges accepted coaching practice of elite child athletes by highlighting the emotional cost to young vulnerable athletes of coaches' regular use of behaviours that their child athletes report as not only abusive but as also having negative emotional sequelae. This further supports the notion put forward by Burke (2001) that we cannot assume that relationships between child athlete and coach are always safe. The pressures for success are everywhere, but in order to create a cultural shift in elite sport towards 'athlete first; winning second' (Martens, 2001) coaches also have to be made aware of their obligations and legal responsibilities towards safeguarding their young athletes. Research is needed to

provide strong evidence which can help move away from exploitative and abusive coaching in the future.

The world of elite sport is a fast changing, highly challenging one where there are increasing demands placed on younger and younger athletes in order to satisfy the public appetite for success. As the rewards become ever more lucrative the culture that this creates for young athletes and their coaches is one in which 'win at all costs' appears to be the only message. The question is then how is success achieved? What coaching methods are being adopted with our young potential medal winners? As 2012 looms ever closer the message sent out by the media is that a successful Olympic games will be measured in medals. So the race is on to find those future medallists, some of whom will still be children now. Coaches are under pressure to produce elite athletes who will be able to compete on the world stage, and the methods that they employ might not be under much scrutiny. But sport should have a responsibility to these people beyond their short time on the podium, and ensure that they are not damaged through their experiences in sport once they leave the sports arena.

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Sport Emotional Response Questionnaire (SER-Q)

Section One- Background Information

Complete the following section. Circle where appropriate

- 1) Are you? Male Female
- 2) Current Age ? 18-22: 22-25: 26-30: 31 and over
- 3) What sport have you competed in at your highest level when a child athlete(under 18)?
- 4) Highest level achieved when a child athlete (under 18)? Recreational Club Regional National International
- 5) Gender of coach when competing at your highest level when a child athlete (under 18)? Male Female

Section Two

Below are some coaching behaviours that young athletes have experienced. Consider each one on relation to the coaching that you have received as a young athlete. Please consider the behaviour of your coach when you were competing at your highest level as a child (i.e. less than 18). There are no right or wrong answers. Circle the answer that best describes your experiences. There are three sections that need to be completed in relation to each coaching behaviour.

Frequency:

This refers to how often you may have experienced this behaviour from your coach.

1= never experienced this; 2=rarely experienced this; 3=Sometimes experienced this; 4= Often experienced this; 5= Always experienced this

Emotional Response:

Now consider how the behaviour made you feel.

1=very negative effect on you; 2=negative effect on you; 3=slightly negative effect on you; 4=No effect on you; 5=slightly positive effect on you;

6=positive effect on you; 7=very positive effect on you

Performance Effect:

Now consider how you think the behaviour affected your performance.

1=very negative effect; 2=negative effect; 3= no effect; 4= positive effect; 5= very positive effect

BEHAVIOUR		Frequency					Emotional Response							Performance Effect				
1	My coach criticised my weight/shape	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
2	My coach criticised my personality	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
3	My coach told me I was stupid	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
4	My coach said I was useless	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
5	My coach put me down in front of others	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
6	My coach told me they were embarrassed by me	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
7	My coach always managed to find my faults	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
8	My coach made me feel small	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
9	My coach made nasty personal comments about me	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
10	My coach talked to me with no respect	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
11	My coach verbally attacked me by shouting at me	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5

12	My coach talked to me aggressively	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
13	My coach deliberately didn't pick me for competition	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
14	My coach walked away from me in training	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
15	My coach rejected me because I couldn't do a skill/move	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
16	My coach made me feel I was worthless	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
17	My coach threatened to physically harm me	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
18	My coach threatened to pull me from the next competition	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
19	My coach said they could ruin my career	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
20	My coach said they'd make training much harder for me	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
21	My coach said mistakes were always my fault	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
22	My coach said bad training sessions were my fault	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
23	My coach blamed my team-mates failures on my performance	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
24	My coach blamed me for other peoples mistakes	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
25	My coach treated me differently to others	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
26	My coach sent me home during training	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
27	My coach made me train on my own	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
28	My coach sent me away from training for a period of time	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
29	My coach ignored me	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
30	My coach walked away from me after a bad performance	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
31	My coach ignored me if I was injured	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
32	My coach didn't acknowledge me in training	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5

Appendix B

Sport Emotional Response Questionnaire (SER-Q)

Section One- Background Information

Complete the following section. Circle where appropriate

- 1) Are you? Male Female
- 2) Current Age ? 18-2: 22-25: 26-30: 31 and over
- 3) What sport have you competed in at your highest level when a child athlete(under 18)?
- 4) Highest level achieved when a child athlete (under 18)? Recreational Club Regional National International
- 5) Gender of coach when competing at your highest level when a child athlete (under 18)? Male Female

Section Two

Below are some coaching behaviours that young athletes have experienced. Consider each one on relation to the coaching that you have received as a young athlete. Please consider the behaviour of your coach when you were competing at your highest level as a child (i.e. less than 18). There are no right or wrong answers. Circle the answer that best describes your experiences. There are three sections that need to be completed in relation to each coaching behaviour.

Frequency:

This refers to how often you may have experienced this behaviour from your coach.

1= never experienced this; 2=rarely experienced this; 3=Sometimes experienced this; 4= Often experienced this; 5= Always experienced this

Emotional Response:

Now consider how the behaviour made you feel.

1=very negative effect on you; 2=negative effect on you; 3=slightly negative effect on you; 4=No effect on you; 5=slightly positive effect on you;
 6=positive effect on you; 7=very positive effect on you

Performance Effect:

Now consider how you think the behaviour affected your performance.

1=very negative effect; 2=negative effect; 3= no effect; 4= positive effect; 5= very positive effect

	BEHAVIOUR	Frequency					Emotional Response							Performance Impact				
1	My coach criticised my personality	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
2	My coach told me I was stupid	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
3	My coach said I was useless	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
4	My coach put me down in front of others	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
5	My coach told me they were embarrassed by me	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
6	My coach made me feel small	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
7	My coach made nasty personal comments about me	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
8	My coach talked to me with no respect	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
9	My coach verbally attacked me by shouting at me	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
10	My coach walked away from me in training	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
11	My coach rejected me because I couldn't do a skill/move	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
12	My coach made me feel I was worthless	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5
13	My coach said they could ruin my career	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5

14	My coach said mistakes were always my fault	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
15	My coach said bad training sessions were my fault	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
16	My coach blamed my team-mates failures on my performance	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
17	My coach blamed me for other peoples mistakes	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
18	My coach treated me differently to others	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
19	My coach made me train on my own	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
20	My coach walked away from me after a bad performance	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
21	My coach ignored me if I was injured	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5
22	My coach didn't acknowledge me in training	1	2	3	4	5		1	2	3	4	5	6	7		1	2	3	4	5

Appendix C

Papers emanating from this research

Gervis, M. & Dunn, N. (2004). The emotional abuse of elite child athletes by their coaches. *Child Abuse Review*. 13; 215-223

* The contribution of the second author was the transcribing of all the interviews, and the conducting of a number of them.

Appendix D

Geographical origins of all registered sport science students at Brunel University from which samples were drawn for Study One (1) and Study Two (2).

Location	1	2
London	55	91
Middlesex	53	84
Essex	37	49
Herts	11	25
Bucks	7	12
Berkshire	4	5
Suffolk	15	15
Lincs	9	5
Hampshire	24	28
Cornwall	5	2
E. Sussex	9	10
Dorset	7	5
Cheshire	2	0
Wiltshire	1	0
Warwickshire	7	12
West Sussex	19	23
Isle of Wight	1	0
Devon	5	7
Kent	14	17
Surrey	7	11
Gloucestershire	4	2
Lancs	1	2
Cheshire	1	0
Somerset	7	9
Oxfordshire	7	14
Leicestershire	1	10
Cambridgeshire	2	0
Wales	1	2
Jersey	0	3
Channel Islands	0	1
Northern Ireland	2	3
Republic of Ireland	3	2
Spain	1	0
South Africa	0	1
Cyprus	1	0
Total	314	446

Source: Brunel University

Ethnicity of all registered sport science students at Brunel University from which samples were drawn for Study One (1) and Study Two (2).

Ethnicity	1	2
White	231	320
White Other	15	10
White Irish	10	11
Mixed	7	18
Black Other	2	9
Asian	21	27
African Black	4	9
Caribbean Black	11	21
Asian/White	6	9
Caribbean/White	3	12
African Black/White	1	4
Asian/Chinese	2	3
Not Given	11	15
Total	314	446

Source: Brunel University