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Exploring predictors of sport commitment in coaches

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Exploring predictors of Sport Commitment in coaches

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ABSTRACT

The Sport Commitment Model (SCM) has been used to gain insight about the factors that influence people's decision to continue participation in sport. Majority of the studies that are grounded in the SCM have been conducted with athletes. To date, few studies have examined sport commitment of coaches however, these did not assess two commitment dimensions per se (functional or "want to" and obligatory or "have to" commitment to sport), rather each has measured certain predictor variables and inferred commitment dimensions based on clustering of predictors [i.e. 13]. This study had one main purpose, to examine the SCM amongst coaches. Specifically, coaches' commitment to sport and its predictors were assessed from the perspective of the coaches themselves. This was conducted in both a team and an individual sport participation environment. Coaches' sport commitment was examined during the respective sports season in order to allow all coaches a chance to participate, using current experience to draw upon when they completed the survey. A sample of 92 coaches from Australia and New Zealand, who participate in various sports, completed an anonymous online survey which assessed commitment to sport dimensions and six of the predictor constructs.

Results from a series of 3 separate linear regression analyses provided initial evidence about the factors that explain coaches' functional, obligatory, and behavioural commitment to sport. It was found that Functional Commitment was significantly predicted by higher Sport Enjoyment, Involvement Opportunities, and Personal Investment. Obligatory Commitment, on the other hand, was predicted by higher Social Constraints and lower Involvement Alternatives. Finally, Behavioural Commitment was predicted by higher Personal Investments and Social Support.

These findings have both theoretical and practical implications for future studies, given that this was the first study which explicitly measured different types of commitment to sport amongst coaches. Results from this study provide a snapshot and a foundation for potential further research about factors that contribute to coaches' commitment to sport.

Declaration

I hereby certify that this thesis does not, to the best of my knowledge and belief:

i. incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis; or
iii. contain any defamatory material.

Signature……

Date……

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Table of Contents

ABSTRACT……2

DECLARATION.……3

ACKNOWLEDGEMENTS……..4

TABLE OF CONTENTS……..5

INTRODUCTION……7

PURPOSE……...15

SIGNIFICANCE OF STUDY……...…….15

RESEARCH QUESTION ……15

HYPOTHESES……..16

METHOD

Participants……..……16

Procedure…….……...17

Measures…..……...18

Preliminary Analyses.……19

Main Analyses……...……20

RESULTS……...20

DISCUSSION…….21

LIMITATIONS……...24

FUTURE DIRECTIONS……25

CONCLUSION……...26

REFERENCES……...27

APPENDICES

Appendix A…….29

Appendix B…….32

Appendix C…….40

Appendix D…….41

Appendix E…….42

Appendix F…….43

Appendix G……44

Introduction

Behind star athletes and children's sporting teams are coaches who devote many hours of their time, whether on a professional, paid basis, or perhaps as an unpaid volunteer. Without coaches, we wouldn't have our athletes, but what drives them is a very much undiscovered area. Within sports, commitment is often used to signify the motivational force behind a person's underlying persistence and dropout behaviours. Sport commitment (Appendix A; pg. 28) has been defined as the "psychological construct representing the desire and resolve to continue sport participation" [3; pg. 6]. Thus, it is a representation of the psychological state of an athlete's attachment to their continued participation [1, 2 & 3] and can be understood on a variety of levels such as "commitment to a particular team, a particular program, a particular sport, or to sport in general". [4; pg. 19]

The Sport Commitment Model (SCM) (Appendix A; pg 28) was first developed by Scanlan and colleagues to examine the psycho-social factors underlying persistence in organised sport. [5] The original SCM contained the following 5 factors that were hypothesized to be predictive of sport commitment: sport enjoyment, involvement alternatives (Appendix A; pg. 28), personal investment, social constraints, and involvement opportunities (Appendix A; pg. 29). [6]

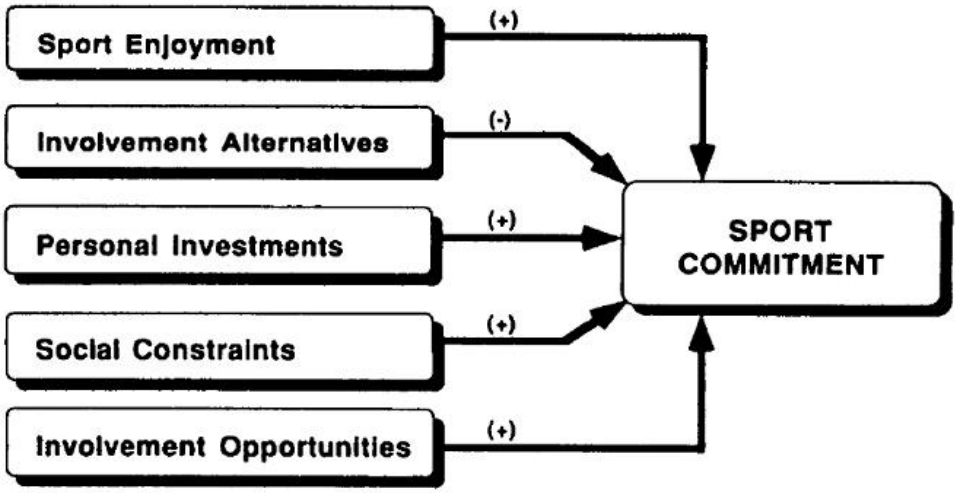

Figure 1. Depiction of the original SCM from "The Construct of Sport Enjoyment" (p.200) by T.K. Scanlan & J.P. Simons, in *Motivation in Sport and Exercise.* [2]

The above figure illustrates the path of each hypothesized predictor of sport commitment. A positive influence (+) is an indication that the particular construct promotes a greater level of commitment, whereas a negative influence (-) indicates that the construct decreases a person's level of sport commitment. The SCM has been tested amongst a range of different sports, age-groups, sporting backgrounds/experience, and contexts (e.g., sport, exercise) and has been modified over the years from the original framework to currently include six predictors and two dimensions of commitment.

Preliminary research, which has sought to extend the generalizability of the framework proposed by Scanlan and colleagues [3] and examine important consequences of commitment, suggested the multidimensional conceptualization of commitment that is represented by functional and obligatory commitment dimensions (Appendix A; pg. 30). In the context of sport several studies have been conducted with athletes [i.e., 10; 11; 12] and coaches (Appendix A; pg. 30) [i.e., 13; 14; 22] and in each of them the two dimensions of commitment were inferred by classifying athletes/coaches into different commitment profiles based solely on the determinants of sport commitment rather than specific responses that

represent each dimension of sport commitment *per se*, meaning that this study will look at commitment based on its determinants and how they relate to each commitment dimension. For example, a study by Raedeke and colleagues [10] examined which commitment profiles were associated with athlete burnout. This study included 236 swimmers (145 females and 85 males) ranging from 13 – 18 years of age who were at the highest level of competition in their age-groups. Based on cluster analyses, an obligatory (entrapment) commitment profile emerged and was characterized by low enjoyment, high social constraints, high personal investment, and high attractive alternatives. Also, a functional (enthusiastic) commitment profile emerged and was characterized by high enjoyment, low social constraints, high personal investment, and low attractive alternatives. This study also found that athletes who had an obligatory commitment profile reported higher burnout scores than those who had a functional commitment profile.

Identical commitment profiles also emerged in a cross-sectional study by Weiss and colleagues [11] which was conducted with 124 competitive female gymnasts who ranged in age from 10 to 18 years. Weiss and colleagues [11] found that gymnasts who had an obligatory commitment profile reported lower parent and coach social support (Appendix A; pg. 30), lower intrinsic motivation, and lower effort and persistence training behaviours than those who had a functional commitment profile [11]. In a one-year follow-up study, Weiss and colleagues [12] found that gymnasts who were classified as functionally committed reported greater parent and coach support, and lower parent and teammate constraints than gymnasts who were classified as obligatory committed.

Additionally, two subsequent studies, one cross-sectional [13] and another, a one-year follow-up [14], examined burnout amongst swimming coaches and their commitment profiles (which were based on clustering of the theoretical determinants of commitment). The results

of these two studies suggested that obligatory and functional commitment profiles amongst coaches resembled those of athletes. Also, these studies found that coaches who had an obligatory commitment profile reported lower exhaustion scores and lower intention to continue coaching than those who had a functional commitment profile.

Finally, a study by Raedeke, Warren and Granzyk (2002) [22] examined coaching commitment and turnover rates amongst USA age-group swimming coaches. For this study, a total of 469 current (300) and former (157) coaches, along with 12 coaches who did not report on their coaching status, completed the requested survey which was designed to assess 'commitment model constructs', which involves such factors as enjoyment, involvement alternatives, any perceived benefits to the coaches, personal investments, social constraints and commitment. Of the coaches surveyed, 244 were men, 221 were women and 4 did not specify their gender, with ages ranging from 17 to 81 years. Both full time (157) and part time (305) coaches participated, with approximately ¾ of them spending 40 hours or less on coaching related activities during the week.

The purpose of this study was three-fold. Initially, it was to observe whether "the hypothesized commitment model provides an adequate fit to the data" [22; pg. 75]. Thus, in line with past research, it was hypothesized that "coaching commitment would be associated with high satisfaction, unattractive alternative options, and high investments" [22; pg. 75]. It was predicted that the benefits and costs of coaching would indirectly relate, through satisfaction, to commitment. The second purpose of the study examined there was a difference between current and former coaches in their commitment, as well as "the theoretical determinants of commitment" [22; pg. 75]. The researchers expected that coaches that were still coaching would report greater levels of commitment, along with "higher benefits, lower costs, unattractive involvement alternative options, and higher coaching

investments" [22; pg. 75] when compared to coaches no longer coaching. As a closing point to complete the study, the final purpose was "to describe current and former coaches on a variety of specific benefits and costs associated with coaching" [22; pg. 75].

Following the data collection and analysis, it was discovered that the results of this study partially supported their predictions, based on the commitment model. It was found that satisfaction and investments were related to commitment and jointly explained 65% of the variance in commitment. However, dissimilar to the predictions, the predictors 'alternative options' and 'social constraints' were found to be un-related to commitment. Additionally, as hypothesized, greater social constraints and investments were found in current coaches, whereas higher alternative attractiveness was found in former coaches. Based on these results, it was concluded that determinants of commitment were "strong predictors of commitment and explained 65% of the variance in commitment" [22; p.78]. It was also concluded that a difference which was found between current and former coaches in the commitment model constructs, was not explained by a large percentage of variance with the variables in the commitment model. This all suggests that when it comes to predicting behavioural outcomes, the commitment model may be less effective than when predicting psychological variables. This provided initial evidence that a commitment model may provide partial insight into coach turnover, however further research is needed given early stages of research in this field.

In an attempt to provide empirical support for an instrument designed to measure multiple dimensions of commitment and their accompanying determinants, a study by Wilson and colleagues [9] surveyed 428 university students and staff who were enrolled in group-based exercise classes emphasizing cardiovascular conditioning. In their study of exercisers [9], it was found that only functional commitment was predictive of exercise behaviour. Also, it

was found that personal investment and satisfaction (enjoyment) predicted functional commitment (accounting for 51% of variance) and that obligatory commitment (accounting for 31% of variance) was predicted by high personal investment, social constraints, satisfaction (enjoyment), and involvement alternatives. Wilson and colleagues' study was important because it provided evidence that two commitment dimensions are associated with specific consequences (i.e., exercise behaviour). More importantly however, this study was the first to have provided empirical support for an instrument designed to measure multiple dimensions of commitment, as well as their accompanying determinants. Given that Wilson and colleagues [9] study was founded on the original SCM, one of its limitations related to the external validity of the results. Specifically, as those results were obtained within an exercise setting, there was a need to replicate those results within the sport setting.

To examine the external validity of the SCM and instrument designed to measure multiple dimensions of commitment and their accompanying determinants, Young and Medic [15] conducted a study with 424 Masters swimmers (220 males and 204 females). Higher enjoyment, personal investments, social constraints from their own children, and lower investment alternatives predicted functional commitment (accounting for 57% of variance). Higher involvement opportunities, involvement alternatives, social constraints from their spouse, own children, and training partners, and lower social support from health professionals explained obligatory commitment (accounting for 47% of variance).

Majority of existing research available to date that is grounded in the SCM has concentrated on athletes. To date, only two studies [13; 14; 22] have examined sport commitment of coaches however, neither of these measured commitment dimensions per se, but rather both have measured certain predictor variables and inferred commitment dimensions based on clustering of predictors. Future research is needed to examine which factors are predictive of

each dimension of commitment among coaches in order to determine what drives coaches to remain committed to their sport and their athletes'.

Despite the utility of commitment dimensions for understanding behavioural patterns in sport, previous studies distinguishing between the two dimensions of commitment classified athletes into different commitment profiles based solely on the determinants of sport commitment rather than specific responses that represent various types of commitment *per se* [e.g., 10; 12]. Given that a study by Wilson and colleagues [9] had provided initial empirical support for an instrument designed to measure multiple dimensions of commitment in exercise contexts, as well as their accompanying determinants, it seems reasonable to suggest that further examination of the items proposed by this study in alternative physical activity settings is worthwhile to determine the construct validity of commitment models.

However, one limitation of the study is that items representing involvement opportunities were dropped from the final model because of structural validity issues that indicated scores on these items could not be distinguished from enjoyment/satisfaction and social support scores in the calibration sample using exploratory factor analysis [9]. Wilson and colleagues suggested that "the lack of item: content clarity expressed in the Involvement Opportunity items" [9] was likely due to the fact that these items include aspects of social experience and positive feelings which conceptually overlap with both social support and satisfaction. A second limitation relates to the external validity of the commitment model supported by the study [9] given that their results were obtained in an exercise rather than sport setting and have only been replicated in sport setting with Masters level athletes [15] but not with coaches to this point in time.

Finally, given that an emphasis in the studies conducted by Weiss and Weiss [12] and Raedeke [10] was on the behavioural consequences of commitment dimensions rather than their psychological determinants, a third limitation of the existing sport commitment research is that multifaceted dimensions of commitment have yet to be explored directly within a sport setting as part of a commitment model.

Weiss and Ferrer-Caja [23] suggested that, in order to enhance our understanding of sport commitment, future studies should examine determinants of different commitment dimensions. Given that the majority of physical activity research available to date that is grounded in commitment models has concentrated on youth sport athletes [4, 24], and to a smaller extent on young elite adult athletes [7, 8] and masters athletes, it remains unknown whether the models of commitment are applicable to coaches or older athletes. Coaches themselves play an integral part in the development of an athlete, using different coaching methods, such as controlling and autonomy style approaches, to work out what drives an athlete to perform at their best [25, 26], however little has been done to discover what drives their coaches, therefore, the present study sought to test an expanded model of commitment to sport in coaches.

Purpose of Study

The main purpose of this study is to examine the SCM amongst coaches. Specifically, coaches' commitment to sport and its predictors will be assessed from the perspective of the coaches themselves. This will be conducted in both a team and an individual sport participation environment in order to target a wider variety of coaches and to examine coach commitment in general, rather than limiting the study to one area. Coaches sport commitment will be examined during the respective sports season in order to allow all coaches a chance to participate and give them the ability to draw upon fresh experiences, rather than having to rely on recall, when completing the survey.

Significance of Study

Commitment dimensions (e.g., functional and obligatory) in athletes, coaches, and exercisers have been associated with various important consequences (e.g., dropout, burnout, and intention to continue participating). For instance, evidence suggests that approximately 35% of swimming coaches discontinue their membership and stop coaching each year [14]. Studies such as Wilson and colleagues [9] and Alexandris and colleagues [1] have also found that factors predictive of dimensions of commitment vary across physical activity domains (e.g., sport, exercise). Therefore, this study was designed to examine predictors of functional, obligatory and behavioural sport commitment in coaches.

Research Question

Which factors predict coaches' functional commitment to sport?

Secondly, which factors predict coaches' obligatory commitment to sport?

Lastly, which factors predict coaches' behavioural commitment to sport?

Hypotheses

Based on the studies that used clustering techniques to classify coaches as having functional and obligatory commitment profiles [10; 11] and findings by studies in exercise [9] and masters sport [15], it was hypothesized that; (a) coaches' functional commitment to sport will predict higher enjoyment, personal investments, and lower involvement alternatives; and that (b) coaches' obligatory commitment to sport will predict higher social constraints, personal investment, and involvement alternatives.

Method

Participants

Prior to the commencement of the study, pilot testing was undertaken through the online anonymous survey. This was conducted with 7 postgraduate students and staff from the School of Exercise and Health Sciences at Edith Cowan University each of whom had experience as a coach. Each participant was provided with an opportunity to make comments relating to any parts of the survey or the study in general. Pilot participants were additionally asked to record the length of time the survey had taken them to complete, so that all potential participants could be provided with an estimate of how much of their time will be taken up by the survey. This was estimated to be 10 – 15 minutes on average. Lastly, pilot participants were asked about any issues they noted in regards to comprehension of the amended items, which had had the wording changed in order to reflect a more coach-oriented perspective.

All testing for the proposed study was undertaken using Qualtrics, an online survey website, or via hand delivery of a hard copy survey, in order to maximise convenience for the wide variety of coaches that were invited to participate. For this study, over 1000 coaches were contacted (exact number unknown as many were distributed by their sporting bodies, rather than the researcher), with a total of 92 coaches (mean age = 33.8; SD = 12.99), both male

(49) and female (37) from a variety of sports including tennis, soccer, athletics, golf, amongst others, completed the survey, with 6 surveys coming back unusable due to missing data, leaving a total of 86 surveys for use in the analysis. The least amount of time spent coaching was observed to be 2 months (mean = 11.05 years; SD = 10.52), however they were still permitted to take part in the study as this allowed for the possibility of comparing whether coaching commitment varied in its predictors and/or outcomes the longer a coach had been coaching. Prior to the commencement of the study, informed consent was obtained from each participant and each person was assured confidentiality before completing the survey.

Procedure

Prior to the commencement of any contact with institutions outside of the university, ethics approval was sought from, and approved by, Edith Cowan University to ensure that the rights of the research subjects, such as their privacy and right to withdraw, were communicated at an acceptable level during the study.

Following this approval, surveys were administered during the sporting season, in order to ensure that all coaches have fresh memories and common references upon which to draw when asked to describe thoughts and/or feelings. In order to obtain participants for the study, the sporting bodies for respective sports were contacted via email, phone, or face-to-face meeting in order to discuss the possibility of a variety of clubs being emailed requesting participants for the survey. Clubs were then contacted via one of the above methods and informed of the study purposes and asked for approval to email the survey to their members. A minimum of one week before the beginning of the surveys, information regarding the study was emailed out to coaches to give them the opportunity to decide whether they would participate in the study. This was contained within the information letter which included potential benefits and reasons for the study, contact details of the researcher should

participants have any questions, and an assurance that any participant may withdraw from the study at any given point without question. Following the information letter, an email was sent to those coaches who are willing to participate, explaining the purpose of the study and a link to access the survey.

In order to target a wider population base, online data collection was utilised, alongside hardcopy collection. This allowed for coaches from all over Australia and New Zealand a chance to participate in the study, rather than the small, less varied sample that could be collected within the one city. However, there are disadvantages to using online data collection, including that it is wholly reliant on the coach reading the email and then wanting to participate and also if they don't complete the survey immediately, there is a strong likelihood that it will be forgotten about and either deleted or left until it is too late to participate.

Measures

The online survey was administered to coaches (see Appendix B) and was comprised of 5 sections. The first section included the required informed consent form. The following section included questions relating to coaches' sport and coaching backgrounds, such as items that assessed about the primary sport, highest level of competition coached, and the amount of investment in sport. This included questions such as 'Are you currently coaching?' and 'How much time do you spend with your athletes'.

The next section asked coaches to rate on a scale anchored at 1 (*not at all true for me*) to 5 (*very true for me*) the degree that people important to him/her support his/her involvement in sport as a coach and included statements such as 'People important to me encourage me to coach my sport'.

Following this, the next section included items that assess the three commitment dimensions and six of the predictor constructs such as ‘I have invested a lot of effort into coaching my sport’ and ‘I feel obligated to continue coaching my sport’. Coaches were asked to respond to each of these items in terms of how they feel about continuing to coach their sport.

The fourth section included questions relating to the coaches’ feelings and attitudes towards the sport, such as ‘I coach without having to think about it’. These survey items were primarily based on items developed by Wilson and colleagues [9] however in line with previous research which provided initial evidence of external validity and reliability [15], each was modified from the original format to be sport-specific. Therefore, functional commitment was measured based on three items and obligatory commitment on five items. Seven items were used to measure the determinant of sport enjoyment, which was comprised of three enjoyment and four satisfaction items based on previous research’s discovery of a moderately high degree of correlation between them [15]. Four items were used to measure involvement alternatives, three to measure personal investments, and 10 items were used to assess involvement opportunities. Participants’ responses to sections 4 and 5 in the survey were assessed using a 5-point Likert-scale, with responses anchored at 1 (*not at all true for me*) to 5 (*very true for me*). Finally, the last section assessed demographic information such as coaches’ name, age, nationality, gender, marital status.

Preliminary Analyses

Data was screened for missing values, normality, and presence of univariate and multivariate outliers. Then, two exploratory factor analyses (EFA) were conducted first using commitment dimension items and then using enjoyment and involvement opportunities items to determine the initial composition and structure, followed by computation of internal

consistency reliability estimates (Coefficient α; Cronbach, 1951). This analytical approach was based on Gerbing and Hamilton's (1996) recommendation of using EFA procedures as a viable method for examining the structure of new measurement instruments. Finally, descriptive statistics such as mean and standard deviation values and Pearson correlations were calculated to test the bivariate association between constructs.

Main Analyses

1. To examine which factors predict coach's functional commitment to sport, which factors predict coach's obligatory commitment to sport, and which factors predict coaches' behavioural commitment to sport, separate simultaneous regression analyses were conducted.

Results

Exploratory Factor Analyses (EFA)

The first EFA using principal components analysis on commitment dimensions revealed a three-factor structure comprising 12 items, total variance = 69.8 %, Kaiser-Meyer-Olkin MSA = .79, Bartlett's test of sphericity, $x^2(66) = 526.23$, $p < .001$. Table 1a (Appendix C) displays 12 items along with their communalities and loading values. The second EFA on enjoyment and involvement opportunities revealed a three-factor structure comprising 9 items, variance = 41.9 %, Kaiser-Meyer-Olkin MSA = .82, Bartlett's test of sphericity, $x^2(36) = 413.71$, $p < .001$. Table 1b (Appendix D) displays 9 items along with their communalities and loading values. Internal consistency, Pearson correlations, mean, and standard deviation values for each commitment dimension and each hypothesized determinant are included in Table 2 (Appendix A).

Regression Analyses

In order to examine the extent to which sport enjoyment, extrinsic involvement opportunities, teaching involvement opportunities, involvement alternatives, personal investments, social support, and social constraints predicted functional, obligatory, and behavioural commitment in a sample of coaches, three separate simultaneous linear regression analyses were performed (see Table 3 - Appendix F). For functional commitment, the predictors explained 58% of the variance, F (7, 78) = 15.24, $p < .001$, with enjoyment, involvement opportunities to teach, and personal investments as significant predictors (all p's <.05). For obligatory commitment, the final model accounted for 42% of the total variance, F (7, 78) = 8.19, $p < .001$, with higher social constraints and lower involvement alternatives being the only significant predictors (all $p's < .05$). Finally, for behavioural commitment the predictors explained 64% of the variance, F (7, 78) = 19.54, $p < .001$, with personal investment and social support being the only significant predictors (all $p's < .05$).

Discussion

The aim of this study was to examine the SCM amongst coaches and determine which factors predict their functional, obligatory and behavioural commitment to sport. In line with this aim of this study two hypothesis were proposed. The first hypothesis posed that a coaches' functional commitment to sport will be predicted by higher enjoyment, personal investments, and lower involvement alternatives. This study found that, in line with previous studies [11; 12], higher functional commitment was indeed predicted by both higher enjoyment and personal investment factors, as well as by higher involvement opportunities (to teach). This means that more enjoyment and satisfaction that coaches experience and more resources such as time, effort, and money that they invest, the more they will want to continue coaching their sport. Of the three hypothesized factors of functional commitment, findings of this study did not suggest that lower involvement alternatives play a major part in

determining a coaches' functional commitment. This may be due to the change of role, from athlete (as in previous studies [11; 12]) to coach, as the choice to become a coach is less likely to have been forced upon the coach through peer or parental pressures. It is more likely that they found it to be an area of interest for them to explore further, or a fun and convenient part time job that they chose for themselves after having experience in that sport as an athlete (high performance, social player or in-between), whereas an athlete may have been placed into that role with none, or fewer, involvement alternatives presented to them by a family or peer network.

The second hypothesis presented stated that a coaches' obligatory commitment to sport will be predicted by higher social constraints and lower involvement alternatives. It was found, in this study, that in line with previous studies [11; 12] on athletes, both social constraints and involvement alternatives were significant predictors, with the final model accounting for 42% of the total variance. One of the differences found between this and previous studies was that personal investment was not a significant predictor of coaches' obligatory commitment. This finding could be explained by the fact that the majority of coaches sampled reported not working for themselves, but rather for another coach or business/team. This would mean that many coaches may not have had to invest significant resources on their own behalf as most of these (e.g., equipment) would be supplied for them.

Due to the limited research done to date on factors that would be predictive of behavioural commitment, no hypotheses were formed for this study. It was found in this study, that behavioural commitment to sport was predicted by both higher personal investment and higher levels of social support with 64% of the total variance being explained in the final model. Having higher levels of Social Support seems to suggest that this factor is very important as this support and encouragement is reflected in their coaching behaviours, in which they reported demonstrating greater energy and putting more effort into their lessons

and programming. A higher level or personal investment indicates a greater amount of resources and time that the coach has put into their sport, which they would be unable to recover if they discontinued coaching. This would lead to a greater level of Behavioural Commitment as when the coach has invested much time and money into areas such as their training and professional development, they are more likely to use what they have learned during this time and apply it to their coaching behaviours on and off the court. This is important as with little personal investment, a coach may not see themselves as participating in coaching their sport long term, which could be reflected in their coaching practices, however more research would be required in this area in order to assess this outcome in further detail.

This study was unique because it attempted to gain insight into how committed the coaches were in their roles, and about factors that enhance and/or reduce their resolve to want to be there (i.e., Functional commitment), to feel compelled to be there (i.e., Obligatory commitment), and to continue with their training behaviours (i.e., Behavioural commitment). Given that this was the first study which explicitly measured different types of commitment to sport amongst coaches, results from this study can provide a baseline point for potential further studies that could be completed in order to gain further insight about factors that contribute to coaches' commitment to sport. In addition, it is would be valuable that future studies examine potential outcomes (e.g., persistence behaviour, performance, burnout, dropout) of each type of commitment. For example, results from such studies would be beneficial in terms of potentially identifying coaches with specific commitment profiles that are more likely to discontinue coaching; which in turn could then be used to help determine ways of coping with issues that may cause this drop out in an attempt to minimise dropout in sport coaching.

Limitations of the Study

1. One of the limitations of this study is that its conclusions are limited to a cross-sectional design and as such any causal link between predictors and sport commitment dimensions need to be interpreted with caution. Longitudinal study design in which these factors could be assessed over a meaningful time period (e.g., specific sport season) would provide additional information about the potentially dynamic process.

2. Secondly, some of the items used to assess coach commitment (such as 'When I see someone else coaching, I feel like training too.') were not highly relevant to coaches and further studies should either adapt these items to suit, or disregard them completely.

3. Thirdly, the methods of distribution need to be assessed as whilst the survey had reportedly gone out to over 1000 coaches, upon speaking with coaches who should have received it they noted that whilst they may receive the email from their governing body, these were often deleted unread or skimmed over and the survey missed.

4. Finally, having coaches self-report on their commitment may not have allowed for an entirely accurate depiction of the factors which are seen to attribute most highly to coach commitment. This is because the coaches may have been inclined to answer with what they perceived to be the 'best' answer, as opposed to the most truthful answer.

Future Directions

In order to further explore this area of research next possible step could involve examining if the findings from this study can be replicated with other populations of coaches. Another area worth exploring would involve looking at potential developmental differences attributable to factors such as gender, sport types, and age amongst other moderating factors. This would be a good area to look at, as it would aid in the development of greater baseline data in the area of coach commitment.

Also, it would seem worthwhile to have future studies examine potential positive and/or negative consequences that could be associated with different dimensions of sport commitment in coaches, such as persistence, performance, burnout, and/or dropout. This could then provide information about factors that might be associated with coaches' decisions to stop coaching their sport and in turn assist in discovering different ways to prevent this. It would also be prudent to do further studies of this nature using both athletes and coaches in order to provide more insight into how coaches' commitment is perceived by those they have the most contact with (i.e., in the sporting context), that is their athletes [17]. This approach would also provide an opportunity for testing of congruency between both the perceptions of the coaches and athletes on the coaches' commitment to sport. This could be useful as coaches may provide an opinion on their commitment that could potentially be different to that of their athletes. Thus, with the addition of the athletes' opinion, it would be both interesting and valuable to examine the congruency between the two perspectives.

Finally, more research with both athletes and coaches needs to be done to examine the factorial validity of different commitment dimensions, especially behavioural commitment.

Conclusion

Theoretically, this study provides a useful baseline for research into coach commitment, from which other studies can be developed. Alongside this, it has also demonstrated what is lacking in this field of research, such as proper survey items specifically aimed at coaches.

Practically, this study allows us to view to snapshot of where coach commitment stood at the time of the data collection. From this, the foundation for future research can be designed in order to more fully understand the factors which contribute most highly to coach commitment.

Present findings from this study suggest that a significant amount of variance in a coaches' commitment to their sport can be explained through predictors hypothesized by the SCM, in particular

- **Higher Sport Enjoyment, Higher Involvement Opportunities** and **Higher Personal Investment** were most predictive of Functional Commitment.
- **Higher Social constraints** and **Lower Involvement Alternatives** were most predictive of Obligatory Commitment.
- **Higher Personal Investments** and **Higher Social Support** were most predictive of Behavioural Commitment.

References

1. Alexandris, K., Zahariadis, P., Tsorbatzoudis, C. & Grouios, G. (2002). Testing the sport commitment model in the context of exercise and fitness participation. *Journal of Sport Behavior, 25*(3): p. 217 – 230.

2. Casper, J.M. & Andrew, D.P.S. (2008). Sport commitment difference among tennis players on the basis of participation outlet and skill level. *Journal of Sport Behavior, 31*(3): p. 201 – 218.

3. Scanlan, T.K., Carpenter, P.J., Schmidt, G.W., Simons, J.P. & Keeler, B. (1993). An introduction to the sport commitment model. *Journal of Sport & Exercise Psychology, 15*(1): p. 1 – 15.

4. Scanlan, T.K., Carpenter, P.J., Schmidt, G.W. & Simons, J.P. (1993). The sport commitment model : Measurement development for the youth-sport domain. *Journal of Sport & Exercise Psychology, 15*: p. 16 – 38.

5. Weiss, W.M., Weiss, M.R. & Amorose, A.J. (2010). Sport commitment among competitive female athletes: Test of an expanded model. *Journal of Sports Science, 28*(4): p. 423 – 434.

6. Waldron, J.J. & Troupe, N. (2008). Applying the sport commitment model to strength and conditioning. *Strength and Conditioning Journal, 30*(2): p. 79 – 82.

7. Scanlan, T.K., Russel, D.G., Wilson, N.C. & Scanlan, L.A. (2003). Project on elite athlete commitment (PEAK): I. Introduction and methodology. *Journal of Sport & Exercise Psychology, 25*: p. 360 – 376.

8. Scanlan, T.K., Russel, D.G., Beals, K.B. & Scanlan, L.A. (2003). Project on elite athlete commitment (PEAK): II. A direct test and expansion of the sport commitment model with elite amatuer sportsmen. *Journal of Sport & Exercise Psychology, 25*: p. 377 – 401.

9. Wilson, P.M., Rodgers, W.M., Carpenter, P.J., Hall, C., Hardy, J. & Fraser, S.N. (2004). The relationship between commitment and exercise behavior. *Psychology of Sport and Exercise, 5*: p. 405 – 421.

10. Raedeke, T.D. (1997). Is athlete burnout more than just stress? A sport commitment perspective. *Journal of Sport & Exercise Psychology, 19*: p 396 – 417.

11. Weiss, W.M. & Weiss, M.R. (2003). Attraction- and entrapment-based commitment among competitive female athletes. *Journal of Sport & Exercise Psychology, 25*: p 229 – 247.

12. Weiss, W.M. & Weiss, M.R. (2006) A longitudinal analysis of commitment among competitive female gymnasts. *Psychology of Sport and Exercise, 7*: p. 309 – 323.

13. Raedeke, T.D., Granzyk, T.L. & Warren, A. (2000). Why coaches experience burnout: A commitment perspective. *Journal of Sport & Exercise Psychology, 22*: p. 85 – 105.

14. Raedeke, T.D. (2004). Coach commitment and burnout: A one-year follow-up. *Journal of Applied Sport Psychology, 16*: p. 333 – 349.

15. Young, B.W. & Medic, N. (2011). Examining social influences on the sport commitment of Masters swimmers. *Psychology of Sport and Exercise, 12*: 168 – 175.

16. Boardley, I.D., Kavussanu, M. & Ring, C. (2008). Athletes' perceptions of coaching effectiveness and athlete related outcomes in rugby union: An investigation based on the coaching efficacy model. *The Sport Psychologist, 22*: p. 269 – 287.

17. Kavussanu, M., Boardley, I.D., Jutkiewicz, N., Vincent, S. & Ring, C. (2008). Coaching efficacy and coaching effectiveness: Examining their predictors and comparing coaches' and athletes' reports. *The Sport Psychologist, 22*: p. 383 – 404.

18. Salmela, J. (1995) Learning from the development of expert coaches. *Journal of Coaching and Sport Science,* 22(2): p. 3 – 13.

19. Young, B.W., Jemczyk, K., Brophy, K., & Côté, J. (2009). Discriminating skilled coaching groups: Quantitative examination of developmental experiences and activities. *International Journal of Sports Science and Coaching, 4*: p. 397 - 414.

20. Carpenter, P.J. & Scanlan, T.K. (1998). Changes over time in the determinants of sport commitment. *Pediatric Exercise Science, 10*: p. 356 – 365.

21. Chairat, C., Vongjaturapat, N., Li, F. & Harmer, P. (2009). The sport commitment model: An investigation of structural relationships with Thai youth athlete populations. *Measurement in Physical Education and Exercise Science, 13*(3): p. 123 – 139.

22. Raedeke, T.D., Warren, A.H. & Granzyk, T.L. (2002) Coaching commitment and turnover: a comparison of current and former coaches. *Research Quarterly for Exercise and Sport; 73*(1): p. 73 - 86.

23. Weiss, M. R., & Ferrer-Caja, E. (2002). *Motivational orientations and sport behavior*. Advances in sport psychology (2nd ed.). Champaign, IL: Human Kinetics.

24. Carpenter, P.J., & Coleman, R. (1998). A longitudinal study of elite youth cricketers' commitment. *International Journal of Sport Psychology, 29*: p. 195 - 210.

25. Mallett, C. (2005). Understanding motivation to enhance the quality of coaching. *Sports Coach: An online magazine for coaches, 28*(3).

26. Amorose, A.J., & Anderson-Butcher, D. (2007). Autonomy-supportive coaching and self-determined motivation in high school and college athletes: A test of self determination theory. *Psychology of Sport and Exercise, 8*(5): p. 654 – 670.

Appendix A

Definitions

Sport Commitment

For the purposes of this study, sport commitment was defined as a "psychological state representing the desire or resolve to continue sport participation."[3; pg. 1]

Sport Commitment Model

SCM was originally developed by Scanlan and colleagues in 1993 for the purposes of examining psycho-social factors underlying persistence in organised sport [5]. This was done through examination of the constructs of Sport Enjoyment, Involvement Opportunities, Involvement Alternatives, Personal Investments, Social Constraints and, following its revisions and modification during later years, the addition of the Social Support construct. [3]

Sport Enjoyment

Sport Enjoyment is defined as "a positive affective response to the sport experience that reflects generalised feelings such as pleasure, liking, and fun" [3; pg. 6]. Studies have found that enjoyment is the strongest and most consistent positive predictor of an athlete's commitment to continue their sporting involvements. [6]

Involvement Alternatives

Involvement Alternatives can be defined as "the attractiveness of the most preferred alternative(s) to continued participation in the current endeavour" [4; pg. 18]. According to the SCM, involvement alternatives are hypothesized to negatively affect sport commitment. [4] This means that the more attractive alternatives an athlete has, the lower his/her commitment to their current sport will be. This is hypothesized and has been found to have a negative impact upon sport commitment. [3]

Personal Investments

Personal Investments refers to the resources that the athlete puts into their sport/activity "which cannot be recovered if participation is discontinued". [4; pg. 18] The SCM hypothesizes that the more an athlete has invested in their sport, the greater his/her commitment will be towards that sport. [3] Studies have consistently supported the hypothesized link between personal investments and sport commitment.

Social Constraints

Social Constraints is characterised as "social expectations or norms which create feelings of obligation to remain in the activity" [4; pg. 18] such as an athlete feeling of being compelled to continue playing or trapped within their sport due to the expectations of significant others. [7] Within the original SCM, social constraints was seen as a positive predictor of sport commitment since it was thought that, the more pressure from significant others a person perceives to continue playing his/her sport, the more committed he/she would be. Similarly, it was also thought that an athlete would be more committed to their sport in order to circumvent any negative sanctions they deem would occur from those important to them, should they leave that sport/activity. [3] Research support for this hypothesis has been mixed as some studies have found that social constraints had either no effect or a weak negative effect on commitment which is in contrast to the positive effect it was posited to exert in the SCM [3].

Involvement Opportunities

Involvement Opportunities refers to "valued opportunities that are present only through continued involvement in a given activity" [4; pg. 18]. For example, this may involve things such as an opportunity to master a skill, to be with sports friends, and a belief that sport

participation is an option for remaining fit. Studies have found that this construct has been difficult to measure since its items tend to cross load with enjoyment and social support or that it correlates highly with the enjoyment subscale. Because of these difficulties, limited number of studies have been able to examine its hypothesized link with sport commitment [3].

Functional Commitment

Functional Commitment refers to the desire to continue involvement in the target behaviour because of volitional feelings of choice or because of "wanting to" continue [9].

Obligatory Commitment

Obligatory Commitment refers to the desire to continue involvement in the target behaviour because of feelings of obligation or because of "having to" further invest [9].

Coach

The coach is the individual who is, for the most part, responsible for designing lessons and recommending training to you as athletes. Along with being primarily responsible for "drawing up team strategies and making roster decisions on teams (on team sports), and is the person in your sport environment who is primarily responsible for organizing your competitive schedule and helping you compete at your best." [18, 19]

Social Support

Social Support describes "the support and encouragement the athlete perceives the significant others provide for his/her involvement in sport" [7; pg. 367]. Social support is hypothesized and has been found to have a positive influence on an athlete's commitment to sport. [6, 8].

Appendix B

Coach Survey

Exploring predictors of sport commitment in coaches

For the purposes of this survey, a COACH can be defined as "the individual who is, for the most part, responsible for designing and/or delivering lessons, recommending training to athletes, drawing up individual/team strategies, making roster decisions, organizing an athlete's competitive schedule, and helping athletes compete at their best. "

SECTION A: ABOUT YOUR SPORT.

Are you currently coaching?

☐ Yes

☐ No

What do you consider to be your primary sport that you coach?

_____

NOTE: Please answer all remaining items in this questionnaire as they related to your coaching of YOUR PRIMARY SPORT.

How long have you coached your sport?

_____ years

_____ months

How much time do you currently spend coaching your athletes?

_____ hours/week

_____ weeks/year (out of 52)

Please indicate your current employment status as a coach:

☐ Paid

☐ Unpaid

If paid for your coaching, is this work:

☐ Full time

☐ Part time

☐ N/A

Estimated coaching salary:

- ☐ $0 - $24,999
- ☐ $25,000 - $39,999
- ☐ $40,000 - $54,999
- ☐ $55,000 +
- ☐ Prefer not to answer

Please indicate which part of the season are you currently in?

- ☐ Off Season
- ☐ Pre-Season
- ☐ Start of Season
- ☐ Mid Season
- ☐ End of Season

Please indicate the highest competitive level that you ever reached as a coach?

- ☐ Local
- ☐ Regional
- ☐ Provincial / State
- ☐ National
- ☐ International
- ☐ Professional

How old were you when you reached your highest competitive level as a coach?

_____ years (1)

SECTION B: ABOUT PEOPLE IMPORTANT TO YOU AS A COACH. Please consider how the following statements relate to the people that are important to you in relation to your role as a coach (for example, your athletes, other coaches, peers in the sporting and wider community, and certain family members).

	Not true at all for me 1	2	3	4	Very true for me 5
People important to me encourage me to coach my sport.	☐	☐	☐	☐	☐
People important to me will think that I am a quitter if I stop coaching my sport.	☐	☐	☐	☐	☐
I have to keep coaching my sport to please people important to me.	☐	☐	☐	☐	☐
People important to me would be disappointed with me if I quit coaching my sport.	☐	☐	☐	☐	☐
People important to me support my sport involvement as a coach.	☐	☐	☐	☐	☐
People important to me think it is okay for me to coach my sport.	☐	☐	☐	☐	☐
I feel pressure from people important to me to coach my sport.	☐	☐	☐	☐	☐

SECTION C: ABOUT YOUR COMMITMENT: Please read the questions carefully and circle the response that best describes how you usually feel about your involvement in your primary sport as a coach.

	Not true at all for me 1	2	3	4	Very true for me 5
I am determined to keep coaching my sport.	☐	☐	☐	☐	☐
I have invested a lot of effort into coaching my sport.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to be with my friends.	☐	☐	☐	☐	☐
Because I coach my sport, I feel satisfied.	☐	☐	☐	☐	☐
I feel that coaching my sport is a duty.	☐	☐	☐	☐	☐
I really like coaching my sport.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to do something exciting.	☐	☐	☐	☐	☐
Compared to coaching my sport, there are other things I could do which would be more enjoyable.	☐	☐	☐	☐	☐
I feel obligated to continue coaching my sport.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to travel.	☐	☐	☐	☐	☐
Coaching my sport is a lot of fun.	☐	☐	☐	☐	☐
Compared to coaching my sport, there are other things I could do which would be more worthwhile.	☐	☐	☐	☐	☐
I put forth a lot of intensity when coaching practice sessions.	☐	☐	☐	☐	☐
I have invested a lot of energy into coaching my sport.	☐	☐	☐	☐	☐
I feel forced to continue coaching my sport.	☐	☐	☐	☐	☐

	Not true at all for me 1	2	3	4	Very true for me 5
Coaching my sport gives me the opportunity to achieve my competitive goals.	☐	☐	☐	☐	☐
I am very committed to coaching.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to gain commercial or job related benefits.	☐	☐	☐	☐	☐
I am very happy when I coach my	☐	☐	☐	☐	☐

sport.					
Coaching my sport gives me the opportunity to relieve any stress I am feeling.	☐	☐	☐	☐	☐
During practice sessions, I persist when faced with adverse conditions.	☐	☐	☐	☐	☐
I would like to stay in coaching for a long time.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to enjoy myself.	☐	☐	☐	☐	☐
I put forth a lot of effort when coaching practice sessions.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to share my knowledge about the sport.	☐	☐	☐	☐	☐
I would be happier doing something else instead of coaching my sport.	☐	☐	☐	☐	☐
I feel compelled to continue coaching my sport.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to get publicly recognized for my achievements.	☐	☐	☐	☐	☐
All things considered, coaching my sport is very satisfying.	☐	☐	☐	☐	☐
I have invested a lot of time into coaching my sport.	☐	☐	☐	☐	☐
I display a lot of energy in developing practice sessions.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to develop my coaching skills.	☐	☐	☐	☐	☐
	Not true at all for me 1	2	3	4	Very true for me 5
I have invested a lot of money into coaching my sport.	☐	☐	☐	☐	☐
I find coaching my sport to be very rewarding.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to have a good time.	☐	☐	☐	☐	☐
Coaching my sport gives me the opportunity to assist my athletes develop their skills.	☐	☐	☐	☐	☐
I am dedicated to keep coaching my sport.	☐	☐	☐	☐	☐
During practice sessions, I persevere to correct athletes' mistakes.	☐	☐	☐	☐	☐

Coaching my sport gives me the opportunity to spend time with people important to me.	☐	☐	☐	☐	☐
Compared to coaching my sport, there are other things I could do which would be more fun.	☐	☐	☐	☐	☐
I feel it is necessary for me to continue coaching my sport.	☐	☐	☐	☐	☐
I find coaching my sport to be very enjoyable.	☐	☐	☐	☐	☐
I am committed to keep coaching my sport.	☐	☐	☐	☐	☐

SECTION D: ABOUT YOUR FEELINGS AND ATTITUDES TOWARDS COACHING YOUR SPORT. Please read each statement, and select the number that indicates how accurately it describes you.

	Not true at all for me 1	2	3	4	Very true for me 5
Most of my coaching sessions follow the same pattern.	☐	☐	☐	☐	☐
I sometimes begin coaching without consciously deciding to do so.	☐	☐	☐	☐	☐
If I don't coach, I feel irritable.	☐	☐	☐	☐	☐
When I see someone else coaching, I feel like training too.	☐	☐	☐	☐	☐
I coach on the same days each week.	☐	☐	☐	☐	☐
I often start coaching spontaneously and automatically.	☐	☐	☐	☐	☐
If I don't coach, I get restless.	☐	☐	☐	☐	☐
Some situations give me a desire to coach.	☐	☐	☐	☐	☐
I tend to do the same coaching activities in each session.	☐	☐	☐	☐	☐
I attend coaching sessions without conscious thought.	☐	☐	☐	☐	☐
I feel tired if I don't coach.	☐	☐	☐	☐	☐
Seeing other people coach motivates me to be more active.	☐	☐	☐	☐	☐
I coach at the same location each time.	☐	☐	☐	☐	☐
I coach without having to think about it.	☐	☐	☐	☐	☐
I feel tense if I don't coach.	☐	☐	☐	☐	☐
Certain surroundings just make me want to coach.	☐	☐	☐	☐	☐
I coach for the same amount of time in each session.	☐	☐	☐	☐	☐
I feel guilty if I don't coach regularly.	☐	☐	☐	☐	☐

SECTION E: ABOUT YOU.

Gender:

☐ Male

☐ Female

Age:

_____ years

What is your current marital status?

☐ Married
☐ Defacto
☐ Separated / Divorced
☐ Widowed
☐ Single / Never married

If you would like to receive a summary of the study's findings, please provide a valid email address below.

_____

You are finished! Thank you for your time and effort.

Appendix C

Table 1a. Results from the Exploratory Factor Analysis (EFA) on commitment dimensions.

	F1	F2	F3
I feel that coaching my sport is a duty.	**.67**	.13	.10
I feel obligated to continue coaching my sport.	**.81**	-.25	.15
I feel forced to continue coaching my sport.	**.85**	-.10	-.00
I feel compelled to continue coaching my sport.	**.74**	.10	-.00
I feel it is necessary for me to continue coaching my sport.	**.84**	.25	.03
I am determined to keep coaching my sport.	.03	**.87**	.17
I am dedicated to keep coaching my sport.	.01	**.90**	.25
I am committed to keep coaching my sport.	.10	**.87**	.25
I put forth a lot of intensity when coaching practice sessions.	.17	.03	**.85**
During practice sessions. I persist when faced with adverse conditions.	.13	.14	**.62**
I put forth a lot of effort when coaching practice sessions.	.08	.31	**.83**
I display a lot of energy in developing practice sessions.	-.03	.24	**.77**
Eigen value	4.11	2.79	1.47
% Variance	23.3	34.3	12.2

Note: F1 – Functional commitment ; F2 – Obligatory commitment; F3 – Behavioural commitment

Appendix D

Table 1b. Results from the EFA on enjoyment and involvement opportunities.

	F1	F2	F3
I really like coaching my sport.	**.84**	.11	.28
Coaching my sport is a lot of fun.	**.90**	.14	.08
I am very happy when I coach my sport.	**.86**	.26	.15
I find coaching my sport to be very enjoyable.	**.92**	.07	.15
Coaching my sport give me the opportunity to gain commercial or job related benefits.	.07	**.80**	.09
Coaching my sport gives me the opportunity to get publicly recognized for my achievements.	.08	**.85**	.08
Coaching my sport gives me the opportunity to achieve my competitive goals.	.39	**.61**	.12
Coaching my sport gives me the opportunity to share my knowledge about the sport.	.22	.15	**.88**
Coaching my sport gives me the opportunity to assist my athletes develop their skills.	.16	.10	**.91**
Eigen value	4.25	1.45	1.25
% Variance	47.2	16.1	13.9

Note: F1 – Enjoyment; F2 – Involvement opportunities (extrinsic); F3 – Involvement opportunities (teach)

Appendix E

Table 2. Means, Standard Deviations, Reliability Coefficients, and Pearson Correlations.

	M	SD	Actual Range	α	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Functional Commitment	4.03	1.04	3.09 - 4.98	.90									
2. Obligatory Commitment	2.36	1.28	1.08 – 3.64	.84	.11								
3. Behavioural Commitment	4.20	0.64	3.56 – 4.84	.80	.44	.22							
4. Enjoyment	4.29	0.88	3.41 – 5.17	.93	.67	-.09	.39						
5. Personal Investment	4.08	0.99	3.09 – 5.07	.80	.51	.26	.53	.37					
6. Involvement Alternatives	2.44	1.15	1.29 – 3.59	.87	-.40	.31	-.13	-.49	-.02				
7. Social Support	4.01	1.05	2.96 – 5.06	.77	.20	-.04	.41	.26	.34	.06			
8. Social Constraints	1.81	1.09	0.72 – 2.90	.81	.25	.55	.38	.16	.34	.10	.17		
9. Involvement Opportunities (Extrinsic)	2.74	1.09	1.65 – 3.83	.70	.38	.18	.37	.38	.45	-.03	.37	.38	
10. Involvement Opportunities (Teach)	4.56	0.61	3.95 – 5.17	.83	.49	.13	.53	.39	.46	-.15	.26	.16	.25

Note: All correlations >.20 were significant at $p<.05$; All correlations >.29 were significant at $p<.01$.

Appendix F

Table 3. Summary of Simultaneous Multiple Regression Analyses for Variables Predicting Sport Commitment Dimensions in Coaches.

	B	*SE B*	ß	*p*	*t* Values
Functional Commitment					
Enjoyment	.46	.12	.40	<.000	3.98
Personal investments	.29	.11	.25	<.010	2.65
Involvement opportunities (teach)	.28	.13	.18	<.037	2.12
Obligatory Commitment					
Social constraints	.58	.11	.51	<.000	5.30
Involvement alternatives	-.24	.11	-.23	<.028	2.23
Behavioural Commitment					
Personal investment	.43	.07	.54	<.000	6.27
Social support	.14	.06	.18	<.019	2.41

Note: For Functional commitment the final model accounted for 58% of the variance; for Obligatory commitment the final model accounted for 42% of the variance; and for Behavioural commitment the final model accounted for 64% of the variance.

Appendix G

Ethics Approval

AUSTRALIA ECU EDITH COWAN UNIVERSITY

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1 June 2011

Ms Erin Bormann
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JOONDALUP WA 6027

Dear Ms Bormann

I am pleased to write on behalf of the Higher Degrees Committee to advise that your master's research proposal has been approved – **Exploring predictors of sport commitment in coaches.**

I also wish to confirm that your proposal complies with the provisions contained in the University's policy for the conduct of ethical research, and your application for ethics has been approved. Your ethics approval number is **6684** and the period of approval is: **27 May 2011 to 31 March 2012.**

Approval is given for your supervisory team to consist of:

Principal Supervisor: Dr Nikola Medic - ECU

The examination requirements on completion are laid down in *Part VI of The University (Admissions, Enrolment and Academic progress) Rules for Courses Requiring the Submission of Theses* available at: http://ww.ecu.edu.au/GPPS/legal_legis/uni_rules.html

Additional information and documentation relating to the examination process can be found at the Graduate Research School website: http://research.ecu.edu.au/grs/

Please note: the Research Students and Scholarship Committee has resolved to restrict Master by Research (1 year) theses to a maximum of 40,000 words or a Master by Research (2 year) theses to a maximum of 60,000 words. Under special circumstances a candidate may seek approval from the Faculty Research and Higher Degrees Committee for an extension to the word length (RSSC 33/04).

I would like to take this opportunity to offer you our best wishes for your research and the development of your thesis.

Yours sincerely

Patricia Brown
Research Assessment Coordinator
Research Assessments- SSC

Principal Supervisor: Dr Nikola Medic - ECU
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