

Bangor University

DOCTOR OF PHILOSOPHY

Arabic women's participation in sport : barriers and motivation among Egyptian and Kuwaiti athletes

Khalaf, Sanabel

Award date:
2014

Awarding institution:
Bangor University

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

**Arabic women's participation in sport:
Barriers and motivation among Egyptian and
Kuwaiti athletes.**

PhD Thesis

Sanabel Bader Hamad Khalaf

**Thesis submitted to the University of Wales in fulfilment of
the required for the degree of Doctor of Philosophy at the
School of Sport, Health, and Exercise Sciences,**

University of Wales, Bangor, UK

2014

CONTENTS

Acknowledgments

Thesis Summary

Chapter One

General Introduction

Historical background 16

Feminism in Sport in Muslim Culture 21

The Role of the Media 26

Sport Organizations 28

Thesis Format 29

Chapter Two

Reasons For The Lack Of Participation Of Women In International Competitions: The Case Of Female Kuwaiti and Egyptian Track and Field Athletes.

Introduction 33

The Social Dimension 33

Educational institutions 36

Methods 37

Results and Discussion 45

Parent's Interviews: Overview 45

Coaches and Administrators interviews: Overview 55

Athletes' interviews: Overview 70

	Conclusion	88
Chapter Three	Need support, need satisfaction, motivation and optimal training behaviours in sport: Examining the applicability of self-determination theory in an Arabic sport context.	
	Aims of the study	92
	Forms of Motivation	92
	Basic psychological needs	94
	Need supportive behaviours	95
	Cultural considerations and SDT	96
	Training behaviours	98
	Methods	101
	Results	107
	Discussion	119
Chapter Four	An intervention to enhance need-supportive behaviours among coaches.	
	Need-supportive coaching behaviour	131
	Need-thwarting coaching behaviour.	134
	Intervention studies	137
	Observational assessment of need-supportive and controlling behaviours	142
	Hypothesis	144
	Method	144
	Results	152
	Discussion	154

Chapter Five	General Discussion	
	Overview of studies	160
	Theoretical contributions of the thesis	162
	Applied contributions of the thesis	163
	Limitations	164
	Further Research	165
	Overall strengths of the thesis and research processes	166
	Conclusion	167
References		169

Appendixes

Study One

Appendix A: Information Sheet of study one. 197

Appendix B: Interview Guide 200

Study Two

Appendix C: Information Sheet of study two. 205

The English version of:

Appendix D: Perceptions of parental need support 208

Appendix E: Perceptions of coach need support 210

Appendix F: Perceptions of fellow athletes need support 212

Appendix G: The Basic Needs Satisfaction in Sport Scale. 214

Appendix H: Behavioural Regulation in Sport Questionnaire (BRSQ). 217

Appendix I: Trait Training Attitudes and Behaviours Questionnaire (TTABQ). 220

The Arabic Version of:

Appendix J: Perceptions of parental need support 224

Appendix K: Perceptions of coach need support 226

Appendix L: Perceptions of fellow athletes need support 228

Appendix M: The Basic Needs Satisfaction in Sport Scale. 230

Appendix N: Behavioural Regulation in Sport Questionnaire (BRSQ). 232

Appendix O: Trait Training Attitudes and Behaviours Questionnaire (TTABQ). 235

Study Three

Appendix P: Information Sheet of study three. 238

The English version of:

Appendix Q: SDT Group Training sessions 241

Appendix R: Control Group Training sessions 250

The Arabic Version of:

Appendix S: SDT Group Training sessions 255

Appendix T: Control Group Training sessions 264

Tables

Kuwait and Egypt differences and similarities that affect female sporting participation.	84
Frequencies and percentages of quotes representing the first order themes obtained from Kuwaiti and Egyptian respondents	76
Measurement model (reasons for item elimination prior to model re-estimation).	109
Factor loadings and their standard errors.	110
Means and standard deviations for the subscales	113
Composite reliability (CR), average variance extracted (AVE), average variance extracted square root (AVE sqrt) and correlation of factors in the measurement model.	114
Indirect effects in the structural model	118
The three dimensions of a motivationally supportive environment that correspond to the three psychological needs.	133
Identified controlling techniques in athletic training situations.	137
The observational checklist.	147
Outline of training sessions for SDT Group.	150
Discussion questions used with control group coaches.	151
Means (standard deviations) for the controlling and cold behaviours.	152
Unadjusted means (standard deviations) and adjusted means ((standard errors)) for the chaotic and need-supportive behaviours.	154

Figures

Qualitative analysis of interview data the perspective of parents	48
Qualitative analysis of interview data the perspective of coaches	58
Qualitative analysis of interview data the perspective of administrators.	59
Qualitative analysis of interview data the perspective of athletes.	73
Motivational sequence model tested in the study two.	100
PLS bootstrapped parameter estimates for the structural paths, and the variance accounted for in the dependent variables.	118
Flow diagram of the intervention procedures	145
Group x test interaction for the frequency of controlling behaviours.	153
Group x test interaction for the frequency of cold behaviours.	153

Declaration and Consent

Details of the Work

I hereby agree to deposit the following item in the digital repository maintained by Bangor University and/or in any other repository authorized for use by Bangor University.

Author Name:

Title:

Supervisor/Department:

Funding body (if any):

Qualification/Degree obtained:

This item is a product of my own research endeavours and is covered by the agreement below in which the item is referred to as “the Work”. It is identical in content to that deposited in the Library, subject to point 4 below.

Non-exclusive Rights

Rights granted to the digital repository through this agreement are entirely non-exclusive. I am free to publish the Work in its present version or future versions elsewhere.

I agree that Bangor University may electronically store, copy or translate the Work to any approved medium or format for the purpose of future preservation and accessibility. Bangor University is not under any obligation to reproduce or display the Work in the same formats or resolutions in which it was originally deposited.

Bangor University Digital Repository

I understand that work deposited in the digital repository will be accessible to a wide variety of people and institutions, including automated agents and search engines via the World Wide Web.

I understand that once the Work is deposited, the item and its metadata may be incorporated into public access catalogues or services, national databases of electronic theses and dissertations such as the British Library’s EThOS or any service provided by the National Library of Wales.

I understand that the Work may be made available via the National Library of Wales Online Electronic Theses Service under the declared terms and conditions of use (<http://www.llgc.org.uk/index.php?id=4676>). I agree that as part of this service the National Library of Wales may electronically store, copy or convert the Work to any approved medium or format for the purpose of future preservation and accessibility. The National Library of Wales is not under any obligation to reproduce or display the Work in the same formats or resolutions in which it was originally deposited.

Statement 1:

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree unless as agreed by the University for approved dual awards.

Signed (candidate)

Date

Statement 2:

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

All other sources are acknowledged by footnotes and/or a bibliography.

Signed (candidate)

Date

Statement 3:

I hereby give consent for my thesis, if accepted, to be available for photocopying, for inter-library loan and for electronic storage (subject to any constraints as defined in statement 4), and for the title and summary to be made available to outside organisations.

Signed (candidate)

Date

NB: Candidates on whose behalf a bar on access has been approved by the Academic Registry should use the following version of **Statement 3:**

Statement 3 (bar):

I hereby give consent for my thesis, if accepted, to be available for photocopying, for inter-library loans and for electronic storage (subject to any constraints as defined in statement 4), after expiry of a bar on access.

Signed (candidate)

Date

Statement 4:

Choose **one** of the following options

a)	I agree to deposit an electronic copy of my thesis (the Work) in the Bangor University (BU) Institutional Digital Repository, the British Library ETHOS system, and/or in any other repository authorized for use by Bangor University and where necessary have gained the required permissions for the use of third party material.	
b)	I agree to deposit an electronic copy of my thesis (the Work) in the Bangor University (BU) Institutional Digital Repository, the British Library ETHOS system, and/or in any other repository authorized for use by Bangor University when the approved bar on access has been lifted.	
c)	I agree to submit my thesis (the Work) electronically via Bangor University's e-submission system, however I opt-out of the electronic deposit to the Bangor University (BU) Institutional Digital Repository, the British Library ETHOS system, and/or in any other repository authorized for use by Bangor University, due to lack of permissions for use of third party material.	

Options B should only be used if a bar on access has been approved by the University.

In addition to the above I also agree to the following:

1. That I am the author or have the authority of the author(s) to make this agreement and do hereby give Bangor University the right to make available the Work in the way described above.
2. That the electronic copy of the Work deposited in the digital repository and covered by this agreement, is identical in content to the paper copy of the Work deposited in the Bangor University Library, subject to point 4 below.
3. That I have exercised reasonable care to ensure that the Work is original and, to the best of my knowledge, does not breach any laws – including those relating to defamation, libel and copyright.
4. That I have, in instances where the intellectual property of other authors or copyright holders is included in the Work, and where appropriate, gained explicit permission for the inclusion of that material in the Work, and in the electronic form of the Work as accessed through the open access digital repository, *or* that I have identified and removed that material for which adequate and appropriate permission has not been obtained and which will be inaccessible via the digital repository.
5. That Bangor University does not hold any obligation to take legal action on behalf of the Depositor, or other rights holders, in the event of a breach of intellectual property rights, or any other right, in the material deposited.
6. That I will indemnify and keep indemnified Bangor University and the National Library of Wales from and against any loss, liability, claim or damage, including without limitation any related legal fees and court costs (on a full indemnity bases), related to any breach by myself of any term of this agreement.

Signature: Date :

Acknowledgements

My greatest appreciation goes to my fabulous country, Kuwait. My warmest appreciation goes to the Prime Minister of the State of Kuwait Sheikh Jaber Al Mubarak Al Hamad Al Sabah and his great family specially Sheikh Rakan Nayef Al Sabah. Your support went a long way in seeing me through my study, God bless you. Special thanks to my Culture office (Kuwait Embassy in London). I thank you all for your words of encouragement and support, which got me through school. Sincere thanks to all the members of the All of SSHE staff, especially my supervisor, Dr. David Markland. Thank you so much for all the advice and support, you have encouraged me throughout four years and given me all your best to accomplish this Thesis. I will always remember your kindness and trust in me. My greatest thanks are due to my husband Saad Alblayyes, who has provided me with everything I need, emotionally and financially without his caring and support it would not have been possible. My wonderful kids, through the hard times you always made me smile and forget the stress I was going through. I cannot forget my wonderful parents, Mr & Mrs AlKhalaf who has been my constant source of inspiration. They have given me the drive and discipline to tackle any task with enthusiasm and determination. For my friends Amna Alromh , Salma Alfreg and Zeina Frahat who offered me unconditional love and support throughout the completion of this thesis and during my life in Bangor.

Thesis summary

This thesis comprises three related studies. The first study is a qualitative examination of reasons for the lack of participation of Kuwaiti women in international track and field athletics. First-hand experience of the current situation in Kuwait has stimulated my desire to discover the reasons for Kuwaiti women's lack of participation in international competitions, and to compare their experiences with Egyptian female track and field athletes. In addition to exploring the views of athletes themselves, the views of coaches, sport administrators and parents were investigated using a qualitative methodology. Research on Muslim women competing in international competitions is limited, especially concerning women from Kuwait, which has created a need to explore the reasons women from Kuwait are not given fair opportunities to take part in such competitions. This issue is of great importance to Kuwaiti females who are involved in track and field events, and is also relevant to other Muslim communities where women are not allowed the same opportunities offered to men with regard to attending international tournaments. In Study One the data revealed that there are regional differences between Kuwait and Egypt in the factors that affect female sporting participation. In Kuwait, society, culture and some members of athletes' families generally do not appreciate female involvement in sport and do not support gender integration in sport. In Egypt, however, society, culture and athletes' parents are supportive of female participation in sport and encourage gender equality. Both countries are similar in terms of a lack of the pro-women policies and institutions in athletics. In addition, both countries suffer from inefficient and outdated equipment and facilities. Even though Egyptian athletes share some similar challenges to participation in sport with Kuwaiti athletes, they are motivated and able to aspire to take part in international competitions. This leads to the question of how female athletes in Muslim countries like Kuwait can be motivated to engage in optimal training behaviours that would potentially enable them to compete at higher levels.

Therefore the second study tested the applicability of a contemporary theory of motivation that has been widely applied to sport contexts, to female sport engagement in Egypt, namely self-determination theory (SDT: Deci & Ryan, 1985).

The aim was to gain insights into the motivational processes involved in female sport in a Muslim country that does encourage female participation that might then be applied in Kuwait. SDT proposes a motivational sequence whereby support from the social environment can enhance the satisfaction of psychological needs, which in turn facilitates more autonomous motivation and optimal behaviours. The sequence was tested by examining the influence of Egyptian female athlete's perceptions of the support offered by coaches, parents and fellow athletes on perceptions of competence, autonomy and relatedness, the facilitation of autonomous motivation for sport engagement and athletes' training behaviours. The model was subjected to partial least squares structural equation modelling. Results largely supported the SDT motivational sequence and this is the first study to do so in an Arabic or Muslim context.

Given that the principles of SDT were upheld in this cultural context, the third study was designed to investigate whether a SDT-based intervention could be applied within the more culturally and socially constrained context of women's sport in Kuwait. Specifically, the third study examined the extent to which an SDT intervention could encourage autonomy-supportive behaviours and reduce controlling behaviours among Kuwaiti coaches of female athletes. In a randomized control group design, coaches received either training in the application of SDT or engaged in general discussions about training. Results showed significant decreases in controlling behaviours among SDT-trained coaches but not among the control group coaches, as assessed by behavioural observations, although need-supportive behaviours increased in both groups. The framework produced in the third study could be further developed to enhance the promotion of autonomous motivation among Kuwaiti sporting women and help change the current situation of Kuwaiti female athletes in sport. Furthermore, contrary to some critiques of SDT that suggest that it is only relevant in Western cultural contexts, the findings of both Studies Two and Three add to a growing body of evidence that the theory has universal applicability.

Chapter One

General Introduction

CHAPTER ONE

General Introduction

1.1 Historical background

Some Western writers have claimed that some Muslim leaders are breaking human rights conventions because of the ban they have placed, preventing women from participating in open sports competitions (Hargreaves, 2007). This has placed the average Muslim sportswoman in a deadlock situation. When Western elite sportswomen are compared to their Muslim counterparts, Western women are fitter, stronger, faster, more skilful, and better prepared for high-level competition (Hargreaves, 2007). This is because they are exposed to higher quality training and training methods, and they are allowed to compete regularly to meet the current standards of the sports world. This is not due to Muslim women's lack of desire to partake in such competitions; rather, it is due to the structure of control that prevents these women's overall progress (Hargreaves, 2007). Kuwaiti sportswomen, for instance, are affected by their cultural background, which restricts their participation in and contribution to public life. Indeed, at one point in time, women in Kuwait were not allowed to work in government establishments, nor were they allowed to run business organizations; furthermore, they were not allowed to go to school.

Women in ancient Egypt were privileged with what can now be referred to as semi-complete equality with men, as historians have agreed that Egyptian women were privileged enough to hold social and legal positions that were not attained by other women in ancient civilizations (Alsorpony, 1996). The position of ancient Egyptians towards females differed considerably from the positions of some other ancient peoples that were known to "Bury Girls Alive", meaning that they would bury girls alive immediately after they were born, upon discovering that they were not male children. This cruel behavior was not known to the ancient Egyptians since having female children did not result to feelings of sadness and gloominess among the people; rather, the birth of a female was a reason for joy (Alsorpony, 1996). The notion of both sexes' equality was continuously reiterated in history and in the

literature in ancient Egypt. To this day, the women's rights movement in Egypt is one of the leading initiatives in terms of women's rights in the Arab Countries. Those involved in the Egyptian movement have worked hard and actively across decades to eliminate discrimination and to improve females' position in society. However, it was not until the early part of the nineteenth century that the context in Kuwait became different from what it once was, and the lifestyle is what it is today. In the ancient days, the lifestyle in Kuwait was 'simpler' and more affordable. Laws were made by men, which placed men in higher authority over women. Due to this simple lifestyle, women were not able to take part in any activity that involved their leaving their homes or immediate environment (Al_Rsheed, 1926). Women were not permitted to study, work, or become involved in any activity that would put them in close contact with the opposite sex (Al-Shmlan, 1959). However, if they were allowed to leave their homes, they had to cover their heads, faces, and bodies (Al_Knaae, 1954).

This also affected women's participation in sports, as the Islamic ideologue castigated women and prevented them from competing. This was evident in the case of the Muslim states that sent their athletes to the 1996 Olympic Games: Kuwait sent 32 men and no women; Saudi Arabia sent 23 men and no women; while Iran sent 34 men and 1 woman. However, Egypt sent 15 men and 10 women. Examples of Egyptians sportswomen who achieved Olympic records are Rana Ahmad Taha (she placed fourth place in the 2007 World Youth Championships in Italy in the hammer event), Marwa Ahmad Hussen (she placed ninth place in the 2002 Asian Games in India in the hammer event), and Amira Mostsfa Mohammad (she placed ninth place in World Olympic 2009 in Ocarina in the shot put event). Currently, the official record for the 2004 Summer Olympics verifies that Arab women's participation at the Games was the lowest since 1960 (Raad, 2004). When the top sprinters in track and field from the Muslim nations were compared with top sprinters from non-Muslim nations, those from the non-Muslim nations were much faster and more skillful across tracks events. Examples of the records for Muslim sportswomen include Dana Al Nasrallah from Kuwait (13.92 seconds) and Rubina Muqimyar from Afghanistan (14.4 seconds), which are incomparable to the far superior times achieved by modern female athletes from the Western world (Hargreaves, 2007).

On the other hand, in the Middle East, members of the elite Islamic upper classes across all countries have the advantage and relative autonomy to carve out cultural opportunities for themselves. They embrace Western culture, including sports (Al-Hadair, 2004; Goodwin, 1994). Egyptian history, which is one of the longest and most continuous for a country in the world, and which extends beyond 3000 BC, is one such Islamic country that has accepted Western civilization. Egypt is characterized by the River Nile, which runs through the middle of its lands and is deemed as the main reason why Egypt is the oldest, most longstanding and ancient society in the history of civilization. Additionally, Egypt is characterized by its distinct geographical location. This has contributed to the development of its history. Islam was present in Egypt during the reign of Arabian Caliph Omar Ibn Al-Khattab under the leadership of Amro Ibn Al-Aas in 641 AD. During the Arabic Islamic Era, Egypt witnessed a development in the areas of architecture and arts, such as the Islamic-styled architecture, ornaments, and decorations; in addition, many mosques, walls, and fortresses were built. Mohammed Ali, who lived in 641 AD, is regarded as the founder of modern Egypt because of the reformations he executed during his era that affected all aspects of life. This made Egypt comply with the modern technology during his era. Naturally, alongside all these aspects of development, in the olden times, Egyptians did not deprive women of practicing or participating in any types of crafts or professions, which is confirmed by the Royal Decree issued by the 2nd Dynasty in 641 AD regarding women's worthiness to hold the position of the King. Ancient history is full of examples that show the Kings' eagerness to consult with and seek the advice of their wives, the Queens, even concerning public affairs or occasions. In their roles, the Queens provided the palace and temple with indispensable, necessary, and complementary activities. In Egypt, the long history of women's rights and the military revolution in July 1952 helped to empower women, and these movements granted women the right to vote, as well as to participate in public, political, and administrative issues at the same levels as the men. Meanwhile, abroad – in other Arabic Countries – female movements were limited to women's interests in social and professional activities rather than political aspects. Generally speaking, the social environment that surrounds women in Egypt has witnessed a great deal of development during the past half-century through the improvement of

female's education and the increasing motivation among the working women, while allowing them to partake (equally) in official governmental sectors. Thus, women can be seen in various professions, and they are also highly placed in positions such as doctors and lawyers, to mention a few.

In Kuwait in 1962, following the discovery of oil, there were dramatic changes across various aspects of life (Bo_Hakma, 1984). A number of improvements were evident in many aspects of the lifestyles adopted by many Kuwaiti citizens, which included sophisticated building techniques. In the education sector, the system also developed in a positive manner, in that education became available for all ages and genders, and was made free from the lowest to the highest level (Algneem, 1985). Sports were not excluded from these developments, as it became evident that the female children were encouraged to partake in sports both in government-supported and private schools, although the level and intensity of these sports were higher in private schools. While government-supported schools have physical education (PE) lessons twice a week, private schools engage their students in sports and exercise activities throughout the week (Al-Mtwaa, 1996). Moreover, the latter schools nurture their students to engage in greater degrees of participation in sports, even after graduation. However, it is evident that the duration of training in the government-supported schools is not sufficient because students have fewer than two hours of PE per week (Kirk, Fitzgerald, Wang & Biddle, 2000). These points are applicable to schools in Kuwait. Thus, the idea of sports participation, if applied to schools in Kuwait, will also be beneficial to female students, who may finally become athletes. Given that girls rely more on their school experiences for their introduction to and continuation in sports, then their experiences in PE are of extra significance (Harris, 2002). Moreover, the lack of female sporting role models in the family and the media indicates that school experiences assume an added importance in relation to girls' future sporting participation (Harris, 2002). Furthermore, girls are also more dependent upon school sports and PE to foster their participation because there are fewer opportunities for them outside this institution to develop and pursue their sporting interests (Harris, 2002; Scraton, 1988).

This improvement in all sectors of the Kuwaiti economy has created opportunities for women to progress from their former lives of surviving in the background to being brought into the limelight. They are now allowed to enter into any sector that suits their desires and ambitions. This newfound freedom gives room for women to take up jobs in any organization or sector, as they so desire. They are also involved in policy development and decision-making processes. The development toward modernization has also affected the way in which Kuwaiti women dress. In the past, they were not allowed to go anywhere without veils, but now they are allowed to dress like their female counterparts in the Western nations, though they are expected to wear “decent” and non-provocative dresses in public places, and they must show the moderate face of Islam in a positive way (Al-Hadair, 2004; Hargreaves, 2000).

However, participation in elite sports is excluded from these new freedoms, as women are still restricted from participating in international track and field competitions. Women’s sports participation has developed within recent years in that they are allowed to participate in certain events, like track and field, tennis, table tennis, and badminton. On the other hand, while they can practice sports, competing in these sports on an international level is solely restricted to their male counterparts. Furthermore, in Kuwait, the media is involved in maintaining the bureaucratic process of discouraging women’s participation in sports, as the media’s attention and focus is mainly on male competitors, placing them in the limelight and keeping women in the shadows.

Conversely, in the last few years in Egypt, there has been a great deal of development in the field of sport for both genders. Evidence of this is provided in the large numbers of clubs and sports organizations that have come to the fore. Furthermore, the types of sports women engage in are numerous, as they participate at competitions of all types of sports. Sports such as tennis, as well as various other ball games, swimming, and athletics are open to female participation. These events reflect the changes that have occurred in modern societies, and as such, these events confirm the equality between the genders in Egyptian society.

However, the level of performance and participation still differs significantly according to the country and sport.

1.2 Feminism in Sport and Muslim Culture

A person's sense of self is represented and formed by social factors that interact with one's internal views and meanings. Being described as "active engagement", identity provides us with interactions between the individual and society (Woodward, 2000). People, places, institutions, and practices, combined with dress and speech, contextualise the construction of social and specific identities (Bradley, 1996). Again Woodward (2000) refers to identity as not being fixed; rather, it is infinitely changing. Woodward uses the metaphor of a fluid, which he describes portrays the series of conflicts and different perceived identifications within society (Sparkes, 1997). This highlights a self that is both a symbolic and social process that combines the interaction of people with various institutions and places (Donnelly & Young, 1999). Female athletes that display traditional masculine traits through sport are often considered "culturally deviant" and are subsequently labeled a "tomboy." Furthermore, they are also sometimes subject to homophobic taunts that function to constrain female participation and enforce heterosexuality (Cooky & McDonald, 2005). Tomboyishness is acceptable in childhood, as it does not threaten patriarchal power; yet, in later life, it is rejected for fear that the woman will not be considered feminine (Hall, 1996). Women will often find themselves needing a strong sense of self in order to be happy with the body they require in order to be top athletes. This type of body will often contradict how society pressurizes them to look in order to be viewed as attractive women.

Generally, the Muslim female body is at the very heart of the theological struggle between Islamic and secular ideologies, whose impact is increased by global politics, signaling the fundamentally complex and unstable nature of the female Muslim body in sport. Compared to the influential postmodern Western culture, which encourages "youth, change and consumerism" and "noise, movement and speed", the Islamists, in particular, portray Muslim women as being vulnerable when it comes to sports participation (Ahmed & Donnan, 1994, p. 13). According to the

definitions that predominate in Islamic society, the representation of the female body has many facets, but the veiled/covered body has become the local/Islamic accepted standard of public womanhood in some countries, although others have adopted more global/Western standards. This confirms the link between the personal and the socially appropriate, and is an example of the ways in which very private bodies can be socially constructed (Halliday, 1994; Mernissi, 1991). The veil, known as the hijab, is a type of barrier or spatial dimension that initiated the “splitting of Muslim space” between men and women, and has gone further in creating the space both publicly and privately today. It has now become a “weapon of male control of women” (Hargreaves, 2007, p. 78). Though large numbers of Muslim females believe that veiling is a requirement of modesty and a sign of obedience to God, other women argue that the veil is indicative of protection from the patriarchal prioritization of women’s physical and sexual attractiveness. This counters the perceived ideals of Western consumerism, whereby women expend money and energy in trying to keep up with the changing fashions that, in many ways, keep them prisoners to their appearance and the market (Shaikh, 2003: 1523). However, the arrival and acceptance of mobile telephones, computer access to the internet, e-mail communication, satellite television, and opportunities to travel to the West have led several Muslim women to become more aware of the level of their cultural constraints than ever before (Hargreaves, 2007).

According to Greendorfer (1993), we are socialized into a particular gender role from birth, according to our physiological characteristics, and “this plays a key role in integrating individuals into society by transmitting cultural values and traditions from one generation to the next” (p.4). For instance, according to Muslim law, women in sport are not allowed to “unify” with men in terms of training or competition, and this is passed on from generation to generation in the sense that young females have to train or compete behind closed doors. Therefore, for a change to occur in gender integration, real democratization can only stem from outside a religious framework (Moghissi, 1999). The danger of a religious-based discourse is in diverting attention away from “societal opposition to the economic, social, and cultural conditions brought about for nearly two decades of Islamization”

(Moghadam, 2002, p. 1148). In any civil society, there is guaranteed protection for civil and human rights, regardless of gender, religion, ethnicity, and class (Moghadam, 2002, p. 1162). However, an Islamic state would not and cannot undertake this protection because it has specific citizenship rights based on sex and religion (Hargreaves, 2007). Female athletes from Muslim societies feel that they have to create and maintain apologetic displays of femininity in order to be accepted and to be allowed to participate in sports, especially given the promotion of patriarchal values, which causes society to buy into a hegemonic interpretation of sport (Markula, 2001).

Faezah Hashenemi, a former member of parliament and a daughter of the former President of Iran, has been a part of the development of sports for Muslim women (Hargreaves, 2007). Muslim women have, to some extent, been integrated into the international women's sports movement. The first Conference for Muslim Women in Sport was held in Alexandria, Egypt in 1994, but even though Muslim women have been integrated into this international body (which is in line with Western feminist sports), there is no mention of special sports for Muslim women. As such, the women have to participate in sports that their male counterparts have handed down to them. To date, there has been no recorded success among working class Muslim women that also participate in sports in the Muslim system (Hargreaves, 2007). Within the Muslim society in the Middle East, significant progress has been made and specialist organizations have been created, such as the Islamic Federation of Women's Sport (developed in 1992) and the Sport Association of Arab Women (developed in 1996). However, these organizations all operate within Islamic rules, meaning that women's participation must often occur behind closed doors, and they are also open to experiencing harsh, unequal gender relations in the family context, where a patriarchal system prevails and fathers and husbands have the right to forbid women from pursuing any athletic career (Hargreaves, 2007). The man still has the right to decide what is acceptable according to his personal opinion.

This system is applicable to sports women in Kuwait, although there is one notable exception in the case of Dina Al-Sabah, a member of the Kuwaiti Royal

family, because she has lived most of her life in Western countries and currently lives in the USA. Though she has refused to follow the Muslim tradition, she maintains that she feels culturally Muslim and Arabic, and that her family is her heritage. To her, the Muslim culture that discourages young girls from exercising makes no sense. She felt more comfortable in the West, pursuing and taking part in a range of sports. She is very conscious of her sport, and she does a lot of training and dieting to sharpen her body to perfection. A bikini is required for her sport (bodybuilding), and she engages in different forms of competitive figure routines that include gymnastics, strength, flexibility, and dance moves. One description of Al-Sabah's physical topography describes her as "complete with wild hairpin curves and cobblestone abs" (O'Connell, 2005, p. 220). In Kuwait, Al-Sabah's behaviour is regarded as contrary to Muslim culture, and many Muslim leaders have made open demonstrations of her explicitly sexualized body as being morally reprehensible to the Muslim culture. Therefore, it is clear that non-conformity to hegemonic femininity in sport (for instance, the control or dominating influence of male Muslim leaders over women as a lesser group, especially through political rules) often results in heterosexist discrimination, but women who appear heterosexually feminine are more accepted in their Muslim society than are women who are perceived as masculine (Krane, 2001, p.155).

In considering the bodies of Muslim women, there is an interesting inter-relationship between personal bodies and culture. Of course, Muslim women in the Middle East are not homogenous as a group, so treating the Muslim culture as uniform would be inaccurate. Rather, a more accurate picture would take into account the different ways in which Muslim women live and interpret their lives. The body of a Muslim woman, irrespective of which ideological interpretation of Islam she ascribes to, or the particular political arrangements of her specific country, is regarded as sacred and holy (Hargreaves, 2007). This means that in different Muslim societies, women are made to live according to the rules they are born into. For instance, a female born in Kuwait is not mandated to use the veil, but if she were to be born in Saudi Arabia, she would be expected and required to use the veil. If she did not, she would be outlawed and thought upon as being a disgrace without

morals. This is part of the reason why Muslim women are anxious about participating in sport in public, and in some countries they are banned from taking part in mixed sporting events such as the Olympics because of Muslim modesty, whereby the use of the veil is very important and precious to many Muslims. This is contrary to the views generally held in the Western world, where women's participation in sports is believed to reflect freedom of choice, gender equality, and the democratic values supposedly inherent in their culture (Hargreaves, 2007, p. 74-5).

However, comparisons of Islamic and 'Western' cultures are complicated and can be misleading. Neither Islamic nor 'Western' cultures are homogenous; each is highly differentiated. In addition, many Muslim women view the use of the hijab as a thing of pride, a politicized act, and not as a symbol of male authority over them, and they thus feel that unveiling and participating in sports may hold an element of imperial control (Kanneh, 1995). On the other hand, in certain countries such as Iran and Saudi Arabia where women are obliged to wear the hijab in public, many of them feel subdued, angry, and are opposed to it. Yet, they feel fearful that if they show their opposition openly, their anti-fundamentalist sentiment may be interpreted as anti-Islamic and may cause a problem with Western Islamophobia (Mahl, 1995). This has meant that the zeal for participation in sports, or in any form of recreation, is not an essential characteristic of the cultural history of women in Muslim societies (Al-Hadair, 2004) because Muslim leaders consider various aspects of patriarchal control to be more important (Karam, 1998; Walter and Al-Faisal, 2005).

In Kuwait, there is moderation between the Western and Islamic cultures, and women are allowed to dress in what is defined as 'decent', non-provocative Western dress without a veil in public places (Al-Hadair, 2004; Hargreaves, 2000). However, in Saudi Arabia, there is a strong compulsion on women to wear the burqah (a material that drapes the body from head to toe with a type of facemask that covers everything but the eyes). This form of dress was also imposed on Afghan women when the Taliban were in power (Al-Hadair, 2004; Hargreaves, 2000). These contrasting views reveal that there are different forms of Islamism, but they may be

summarized as essentially anti-colonial and anti-American, with a resurgence of ethnic politics that attempts to incorporate religious terms, centering on the Qur'an and the Hadith (Halliday, 1994; Mernissi, 1991). According to the Algerian runner, Hassiba Boulmerka, who won a gold medal in the 1500-meter event at the World Athletic Championships, there is nothing in the Qur'an that disallows women who are zealous in their Islamic faith from taking part in open sports competitions and from wearing Western-style sportswear (Hargreaves, 2000). However, in Kuwait, an Islamist Member of Parliament, Waleed al-Tabtabai, was noted to have made numerous complaints about the 'obscene' display of women's bodies during the televised coverage of women's beach volleyball, diving, and synchronized swimming at the Sydney Olympics in 2000. He concluded by stating that such events should not be allowed as sports because they only reflect Western standards which, according to Islam, do not afford the woman's body any form of sanctity, honour, or protection (Carnell, 2000). It can, therefore, be seen that the lives of Muslim women are different, depending on their religious background, location, and social standing; however, sport is still very much limited for women, depending on how much she is prepared to sacrifice within her society. In Western society, it is often just a case of sacrificing her femininity, but in Muslim cultures, it can be a much greater sacrifice and it might hold much deeper implications.

1.3 The Role of the Media

The mass media has become, within the past few decades, one of the most powerful institutional forces in modern society. According to Boutilier and SanGiovanni (1983), our attitude and knowledge of ourselves is partly shaped by others through the written media values. Equality has been at the centre of many articles of mass media coverage regarding women's sports, and it is an area with many issues that deserve being written about. The sports coverage of women is limited in comparison to the coverage of male sports. Female athletes are often ignored in the media and, therefore, female sport is less well promoted as a general interest (Miloch, Pedersen, Smucker, & Whisenant, 2005). This lack of attention could then allow society to easily conclude that sportswomen have very little value, and girls should not strive for this type of career. If a woman has reached a very

prominent level in sports, by which she is known all over the world, the media tend to associate her with something bad, while men are mostly associated with success (Hardin & Shain, 2005). Photographs of sportswomen are often individualized, sexualized, and accompanied by references to their marital status, private lives, femininity, and personal problems. In contrast, the high coverage of male sports makes it appealing to boys to become a sportsman. These sportsmen are often looked upon as heroes and the envy of other males. Television is possibly the most dominant media form that is present in society. It is accessible to the majority of people in nearly every country of the world. Television viewers are people from all walks of life with every type of interest, belief, and personal opinion, yet the analyses that have been done on television statistics suggest that women do not receive even one percent of the sports coverage on television (Phillips, 1997). Additionally, the actual percentage increase in the coverage of women's sports participation is still insignificant (Boutilier & San Giovanni, 1983). This can be affected by many factors that have been mentioned in research on the sponsorship and funding for sports; however, without televised coverage, the women remain trailing their fellow male competitors.

While every culture has its own meanings associated with sports, in many nation-states, female sports are often marginalized and trivialized in comparison to male sports (Messner, 1998). In the Muslim countries, the underrepresentation of women in sports in the media is particularly problematic. The reality of there being top sportswomen who are powerful and fit is still being denied and hidden from general view in most Arabic countries. In many Muslim countries, the government exercises control over Muslim female athletes through the media, preventing other Muslim women from seeing or knowing about the performance of their female athletes. For instance, during the Sydney 2000 and Athens 2004 Olympics, Muslim countries instructed their television networks to keep the coverage of women's events to a minimum (Hargreaves, 2007). The Islamist leaders further decided to circulate information from the Ministry of Islamic Guidance and Culture in Tehran, directing media outlets that there should be no live images of women athletes, and that before using any clips from the games, they should be vetted. Furthermore,

instructions were given that “Editors must take care to prevent viewers from being confronted with uncovered parts of the female anatomy in contest” (Taheiril, 2004, cited in Hargreaves, 2007). One Kuwaiti MP described the television coverage of the Athens Olympics as a “great catastrophe”. Kuwaiti society threatened action against the Information Minister and the senior officials because of their anger at the adverse effects of ‘revealing and indecent’ sportswear on grounds of morals (Iran Daily, 2004) Muslim societies have demonstrated by their symbolic annihilation of Islamic sportswoman in the media that these women have little or no value in society in general, and especially in relation to their male counterparts (Kane & Greendorfer, 1994).

The media is facilitating and encouraging that any development and freedom of female expression is halted not just in sports, but in day-to-day life and society in general. The media are encouraging stereotypical opinions to stay without being challenged, and members of society, especially those in Arabic societies, are being encouraged to keep women in roles that are ascribed to them. Men are being pushed to become greater and greater role models of strength and power, while at the same time, women are still only allowed to be viewed as feminine if they are not active in a “man’s role”, as society sees it.

1.4 Sport Organizations

Models and patterns of the principles of management systems are, theoretically, universally applicable, and then they should be effective, no matter where and by whom (or for whom) they are used. However, cultural attitudes in the workplace often vary and, as a result, so do management systems. This variety in management practices can have an effect on individuals’ discipline levels and productivity, rendering end results improved or damaged. All too often, men succeed in sports at higher levels than do women, due to the traditional management practices being used in conjunction with strong discipline factors; in some, cultures women in sports are still not taken seriously and are trained as if they are participating “just for fun”. The need for and the importance of women's sports and general PE at all levels is quite obvious. Half of the members of the population

are female, and so it is vital that specific programmes should be set up to improve, enhance, and push the boundaries of women's physical capabilities and sports abilities. Furthermore, stimulating women's interest in sports will naturally encourage their physical and mental health.

Over the past decade, government policies in certain countries, such as in Bahrain, Egypt, and Iran, regarding women's sports have been seen as a priority, and women's programmes and policies have become overwhelmingly liberal, with a shift in focus on equality to equity (Hall, 1996). It is worthy to note that over the past few decades, there has been a great deal of improvement in some governments' policies regarding women's sports, as priority is now given to women's sports, and the women in sports are also receiving media coverage. That being said, the amount of respect being accorded to the sports that are performed by males is the same as that accorded to their female counterparts. In addition, Hall (1996) argued that the dominant pressure in sports feminism is the desire for equality, which influences the government legislation involved, and calls for more specific strategic aims in sports.

While secular Muslim feminists are seeking to separate religion from the state and to secure freedom of religion (Moghissi, 1999), Islamic feminists are pursuing the possibility of operating within an Islamic paradigm in accordance with the Shariah law (Badran, 2002). As a result, in certain countries such as Kuwait, Bahrain, Egypt, and Iran, infrastructure has been established for girls' and women's sports. However, while this is a good start to affording females equality in sport, great differences still remain between these countries regarding the resources available for boys and girls. In addition, for men and women who participate in single-sex settings or in public venues, wearing Islamic clothing makes the situation more complex and widens the issue of equality much further than in the sporting world alone.

1.5 The thesis

This thesis will comprise three related studies. The first study is a qualitative examination of the reasons for the lack of participation of Kuwaiti women in international track and field athletics. First-hand experience of the current situation

in Kuwait and Egypt has stimulated my desire to discover the reasons for Kuwaiti women's lack of participation in international competitions, and to compare their experiences with those of Egyptian female track and field athletes. In addition to exploring the views of the athletes themselves, the views of coaches, sports administrators, and parents will be investigated using a qualitative perspective. Research on Muslim women competing in international competitions is limited, especially concerning women from Kuwait, which has created my need to explore the reasons why women from Kuwait are not given fair opportunities to take part in such competitions. This issue is of great importance to Kuwaiti females who are involved in track and field events, and it is also relevant to other Muslim communities where women are not allowed the same opportunities offered to men with regard to their ability to attend international tournaments.

The factors influencing participation identified in the qualitative study, such as social, cultural and political issues are not possible for one individual to change. However, I observed that Egyptian athletes had a high level of motivation despite a lack of supportive policies, organizations, facilities, and equipment. Contemporary motivation theories offer a framework for facilitating the motivation of individuals, but there is currently no research available on the motivation of athletes in Arabic societies. Therefore, there was a shift in focus in the subsequent studies in the thesis from examining facilitators and barriers for Kuwaiti women in sport to focus on motivational factors which could potentially be modified at the individual level. The purpose of the second study aimed to test the applicability of a contemporary theory of motivation – namely, self-determination theory (SDT: Deci & Ryan, 1985), which has been widely applied to sport contexts, and to female sport engagement within an Arabic culture. The motivational sequence proposed by SDT is tested by examining the influence of female athlete's perceptions of the support offered by coaches, parents, and fellow athletes on perceptions of competence, autonomy and relatedness, the facilitation of self-determined motivation, and athletes' training behaviours. The results largely supported the SDT motivational sequence. Therefore, the third study was designed to investigate whether an SDT-based intervention could be applied within an Arabic context. In particular, the third study examined the

extent to which an SDT intervention could encourage autonomy-supportive behaviours and reduce controlling behaviours among Kuwaiti coaches toward female athletes.

Chapter Two

Reasons For The Lack Of Participation Of Women In International Competitions: The Case Of Female Kuwaiti and Egyptian Track and Field Athletes.

CHAPTER TWO

Reasons for the Lack of Participation of Women in International Competitions: The Case of Female Kuwaiti and Egyptian Track and Field Athletes.

2.1 Introduction

The current chapter aims to explore reasons behind the lack of participation of Kuwaiti women in international track and field athletics and to compare their experiences with those of Egyptian female track and field athletes. In particular there was a focus on the impact of relevant social agents in supporting women in sport. Sarason, Sarason, and Pierce (1990) proposed that social support might affect various aspects of sports performance; indeed, recent studies have demonstrated links between social support and Olympic performance (e.g., Gould, Greenleaf, Chung, & Guinan, 2002). Social support has been shown to encompass structural and functional aspects of interpersonal relationships. Structural aspects refer to the existence of, and the interconnections between, social ties (Cohen & Syme, 1985). These social ties are dependent on a number of other factors, such as how an individual fits into his or her surrounding society, the size of his or her network, and how often that individual has contact with his or her social network. Functional aspects of social support refer to the particular functions served by interpersonal relationships. This type of support is used to describe specific types of social support that function to protect people from the negative impact of specific types of stressors.

2.1.1 The Social Dimension

Social support is often overlooked as a psychological tool to improve one's performance in sports, which results in the athlete or team of sportspeople lacking self-esteem and not performing (in life in general or in the sports life) to the maximum ability. High social support is often connected with improved performance (Rees, 2006). Indeed, Gould, Jackson, and Finch (1993) suggest that athletes should

be encouraged to be proactive in harnessing social support from those around them. Social support can also have beneficial effects on health and personal adjustment, physical health, and physiological processes (Rees, 2006). Social support often plays a role in many aspects of sports performance (Cohen and Syme, 1985).

Peers and friends can usually provide part of the help and support needed, but there are often professionals like coaches who hold specialist training, authoritative knowledge, and a wide array of experience and expertise in handling difficult situations, and who are able to provide effective support. These professionals are, at times, used as a last resort, as it is human nature to need to feel loved and be happy in the knowledge that an individual's own personal network will provide him or her with the support and encouragement needed to feel content. This means that it is very important to have a good social network comprised of family, coaching staff, and educational institutions. The sports organizations can also provide support in the form of organizational structures, resources and facilities.

2.1.1.1 Parents

Family members have been identified as providing diverse forms of social support, including emotional and tangible support (Cohen and Syme, 1985). In addition, research has demonstrated that athletes reported a preference for more social support that extends beyond that given by coaches and trainers (Chelladurai & Saleh, 1978; Erle, 1981). If a child shows a talent for one particular sport, it is often the parents that push this child to improve and dedicate a lot of his or her childhood to training and striving to become the best in his or her field, ignoring the normality of what a childhood should look like (Durand-Bush, Salmela, & Thompson, 2004). These so called 'pushy parents' are often the ones who decide the career of the child and dictate the child's goals in life; these parents, at any given opportunity, will structure the lives of these children around a particular career (Bloom, 1985; Cote, 1999; Csikszentmihalyi Rathunde, Whalen, & Wong, 1993). The parents provide the support and encouragement needed for that child to push him/herself as hard as he or she can. Children are more likely to be active through a combination of sports, personal transportation, and/or free play. The free play can be part of the activities

that children are involved in, without supervision, and the type of play they engage in with their age mates in the playground. Family support can range from verbal encouragement, to paying fees, to providing transportation to a physical activity event. It can include paying for equipment, providing the child with personal schooling, and allowing and encouraging the child to prioritize their sport before anything else.

2.1.1.2 Coaching Staff

The importance of a supportive training environment has been highlighted by both coaches and athletes. Salmela (1996) reported that 58% of the coaches they surveyed preferred a supportive training style. Furthermore, Salmela (1995) reported that many coaches extended their support to include the personal concerns of the athlete. The development of the athlete, which is the goal of any coach, has to be a balance of all that the athlete needs at any given moment and the ratio of training, support, and encouragement is constantly changing. Athlete development is a function of training, competition, and organizational behaviours. Training behaviours involve applying knowledge towards helping athletes acquire and perform skills in practice. Knowledge surrounding competition is designed to help athletes perform to their maximum potential in competitions. Knowledge must be applied in order to optimize the conditions for training and competition. This applies to individual athletes, individuals within a team, and teams as a whole. Zander (1975) identified cohesion as one of the fundamental components of effective teamwork. Cohesion has been defined as “a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs” (Carron, Brawley, & Widmeyer, 1998, p213). In addition, cohesion emerged as a multidimensional construct that is comprised of both task and social components. Task cohesion is reflected in the extent to which a team is unified around task objectives, performance, and productivity. Social cohesion refers to the development and maintenance of social relationships between team members. Cohesion has been linked to many group and individual outcomes.

Individual athletes' behaviours are often guided by the types of goals they set for themselves. Whether it be to win a competition or to improve their personal best time, goals serve an important motivational tool. These goals can be determined by the individual, their trainer, or it might be a joint decision made between the two of them. In general, it is more common for athletes to set themselves individual goals rather than group goals, but group goals are also often needed to be set either by the group (which is united in coming to a decision) or the coach of that group (Carron, 1988; Kim, 1995; Smith & Smoll, 1997; Zander, 1982).

2.1.2 Educational institutions

Scruton (1987) describes physical education as reinforcing gender differences in terms of the activities offered and through the attitudes and reactions of teachers. Rich (2003) explored how newly qualified physical education teachers construct the 'problem' of girls' low participation levels in physical education. Rich argues that in many studies, 'access' to the practices is taken as the main focus for change, instead of reflecting on the suitability of these sporting structures, as they affect the girls. However, very often the teachers could not fully identify and understand the feelings of the girls who were reluctant to take part in physical education lessons or the girls who struggled in class, as the teachers would have been sportsmen or women and would have had a positive experience in physical education lessons. Instead of looking at the nature of gender power relations itself, the teacher's main role should be to provide easy access and opportunity to all in order to gain the benefits of sport. Rich (2003) reports that many teachers, despite expressing a desire to change the gendered nature of physical education and to support equal opportunities, actually support the notion that girls are "their own worst enemies" (Talbot, 1988) for not making the most of the opportunities provided for them. Many teachers become disappointed when their efforts to improve girls' participation are unsuccessful, and they revert back to essentialist notions of gender; they fall into beliefs that the only explanation for the girls' reluctance to participate could be biological and natural, rather than looking at the shortcomings of their own teaching methods and the delivery of lessons (Humbert, 1995; Nugent & Faucette, 1995). Physical education teachers must relate to girls in meaningful ways and personalize

lessons. Talbot (1993) encourages teachers to confront their beliefs and prejudices to identify the contextual factors in schools that affect teachers' ability to change, and to consider influencing factors such as teaching styles and grouping methods. This should be an ongoing process encouraged through peer observations, training courses in-house and externally, and staff development days.

2.1.3 The current study

The purpose of the current study is to try to identify and examine some of the facilitators and barriers for Kuwaiti women's participation in international track and field athletics. Comparisons will be made between Kuwaiti and Egyptian athletes, coaches, parents, and administrators, due to the fact that Egypt is an Arabic Muslim country that shares its history with Kuwait in terms of their Islamic rules. There are, however, certain differences in some customs and traditions. In addition, Egypt has a great history of female athletes in various sports fields, especially since they hold significant progress in female track and field athletics when compared to Kuwaiti female athletes. Furthermore, Egyptian athletes have had great achievements in track and field records both in Arabic and international competitions. In addition, there are a large number of female track and field athletes in Egypt unlike in Kuwait, where there are few female athletes. Moreover, there are many different clubs in Egypt, whereas there is just one club in Kuwait that trains female track and field athletes. These considerations will help me to compare these conditions of Egyptian and Kuwaiti athletes in order to investigate the factors that hinder Kuwaiti athletes from gaining access to international competitions.

2.2 Methods

2.2.1 Qualitative approach

Qualitative research will be useful in my study, as it will provide an interpretive paradigm that will help to develop a deeper understanding of social phenomena by adopting a philosophical stance to guide the investigation (Maykut & Morehouse, 1994). This also relates to the cultural values and views that we have today. Qualitative research can develop widespread views and perspectives on

others by using multi-method techniques, which will be discussed later, to explore the approaches used. Qualitative inquiry adopts a particular perspective on the nature of social phenomena. In addition, qualitative research implements certain key elements that are commonly regarded as giving this method its distinctive character. These key elements according to Ritchie and Lewis (2003) include:

- Providing an in-depth understanding of the social world of research participants by learning about their social and material circumstances, their experiences, perspectives, and histories, and being able to interpret them properly.
- Samples that are small in scale and purposively selected on the basis of salient criteria.
- Data collection methods, which usually involve close contact between the researcher and the research participants, and which are interactive and developmental.
- Analysis that is open to emergent concepts and ideas, which may produce detailed descriptions and classifications.
- Outputs that tend to focus on the interpretation of social meaning through mapping and representing the social world of research participants.

Qualitative research encompasses many methods and theoretical approaches, and they are not all compatible to every study. According to Charmaz (2001, p.683) "Coding is the pivotal first analytical step that moves the researcher from description toward conceptualization of that description." Coffey and Atkinson (1996) went further to suggest that there are three stages involved in coding:

- Noticing relevant phenomena.
- Collecting examples of those phenomena.
- Analysing those phenomena in order to find commonalities, differences, patterns, and structures.

Esterberg (2002) suggests that far from being the end of data analysis, coding is only the beginning, as now is when that vital 'So what?' question that must be addressed. Far from simplifying the data, Coffey and Atkinson (1996) argue that coding acts as a form of "data complication." Quotes should be used, as they are provided by the participants, and one must then try to interconnect these quotes into key themes and into theoretical concepts. Therefore, the use of a qualitative approach is a strength in this study because it allows for the proper portrayal of personal experiences, meanings, contextual factors, and theory/hypothesis generation, taking account of cultural diversity and enabling an in-depth exploration of the topic (Lee, Mitchell, & Sablynski, 1999).

2.2.2 Procedures

2.2.2.1 Interview Guide

A qualitative interview has been defined as "a conversation with a purpose' in which the aim of the interview is to obtain feelings, perspectives and perceptions from the participants in the research" (Holloway, 1997, p.94). Important to note is the useful aspect of interviews, which can be supplemented with the observation of "non-verbal" reactions (Kumar, 1996). Maykut and Morehouse (1994) suggested that an experienced interviewer could use semi-structured interviews. This is because they consist of a standard set of questions and they also allow the researcher to adopt a free approach in data collection insofar as the researcher has the freedom to alter the sequence of questions or to probe for more information with subsidiary questions (Crossley, 2000; Esterberg, 2002; Gratton & Jones, 2004; Holloway, 1997).

The interview guide for the current study is divided into key themes for all participants, which contain a set of different questions designed for each group to ensure their theoretical validity (see Appendix 1). It was aimed at exploring the factors preventing Kuwaiti female athletes from engaging in competition on the international stage. The questions formed a set of interrelated themes. The first key theme focused on the social dimension and culture (e.g., parent's encouragement, society, physical education class, function of culture, and gender integration). In addition, factors affecting technique as a second key theme were included (e.g.,

policies, organization, facilities, equipment). A number of general, fixed questions were prepared for the interview, while other questions resulted from the ongoing discussion. The interviews I conducted were semi-structured, giving the interviewees the opportunity to express their personal beliefs (Swetnam, 2004). My questions were initially written and organized in English, but were later translated into Arabic, the participants' first language, for ease of communication. To ensure the accuracy of the translation, this was done by an independent translator who speaks Arabic and English.

The study entailed my going to Kuwait and Egypt to conduct the interviews; this required that my sampling technique involve a process of accessing my participants through gatekeepers. Gatekeepers are those in charge of the day-to-day running of organizations/associations. Therefore, in terms of this research, the administrators are the gatekeepers.

Gaining access through gatekeepers can be uncertain (Schensul, Schensul, & LeCompete, 1999), as the gatekeeper's final decision can either grant researchers access to the setting or dismiss them altogether. Gaining access is difficult, especially to female athletes in an Islamic society. Being a female student and a Muslim made it easier, and it accorded me a degree of insider status in getting to my participants. This is because I was deemed to be one of them, so gaining access through the gatekeepers was not particularly difficult and not as stressful as expected, though economically in terms of time, money, and effort, it was a demanding task. This is because I had to travel to Kuwait and Egypt in order to undertake the fieldwork. The participants were recruited through the Kuwaiti and Egyptian National sports administration (a group of administrators in charge of sports development in the two different countries). I travelled to each of these countries for discussion with their administrators, and I received their confirmation allowing the participants to get involved in this research before I was able to carry it out.

2.2.2.2 Ethical considerations

Ethical procedures were properly followed and respected, although protecting confidentiality is often difficult (Plummer, 1983). The first step in the

procedure was to obtain approval for the project by the Ethics Committee of the School of Sport, Health, and Exercise Psychology at Bangor University. Then, the interviewees were recruited through the sports administrators, who are national representatives of the Kuwaiti and Egyptian track and field organizations; these individuals acted as gatekeepers. The questions were explained to the administrators and they were asked for permission to allow the athletes, coaches, and other administrators to be part of the study. Interview-based research gives a lot of power to the researcher, so the researcher must, according to Glesne and Peshkin (1992, p. 117), "consciously consider and protect the right of the participants to privacy."

The athletes, coaches, administrators, and parents were recruited individually and agreed to take part in the study. In order to ensure effective confidentiality, the use of fictitious names (pseudonyms) was employed during the data transcription process (Delamont, 1992; Glesne & Peshkin, 1992; Creswell, 1998). The participants were also told that they could withdraw from the study whenever they wished (Diener & Crandall, 1978); they were not compelled to go through with participating in the study unless they were comfortable with it, and they were reassured that their names would not be released to the public. Participants were free to discuss their views, and they were free not to answer specific questions.

2.2.2.3 Pilot study

As soon as the interview guide was written, it was important to pilot it so as to iron out any unforeseen problems that would have occurred. For example, the language used in the questions may be too formal or, conversely, too informal, and this may be hard to tell without testing the interview. The piloting of the interview also serves the purpose of acting as a run-through in order to gain more confidence in the interviewing technique. The interview guide was pilot tested on eight members of the track and field squad in Bahrain. The test was carried out with athletes, coaches, administrators, and parents (two of each). Questions were amended or eliminated as was deemed fit, until it was felt that the guide provided a

balance between establishing the study's boundary, while allowing the participants the freedom to pursue issues personally relevant to them.

2.2.3 Main Study

2.2.3.1 Participants

The participants fell into four groups: athletes, athletes' parents, coaches, and sports administrators. There were 12 Kuwaiti athletes (age 17 to 19 years) and 22 Egyptian athletes (age 17 to 21 years). The athletes engaged in sprint, middle-, and long-distance track events, high- and long-jump, shot put, discus, hammer, and javelin. The Egyptian athletes participated at university (n=4), local club (n=3), county (n=6), national (n=6), and international (n=3) levels. The Kuwaiti athletes participated at local club (n=9) and national level (n=3) only. There were three Kuwaiti coaches and five Egyptian coaches. All coaches were formerly elite athletes themselves and had an average of 12 years' coaching experience. There were three sports administrators from each country. There were 10 parents of Kuwaiti athletes (seven mothers and three fathers) and 19 Egyptian parents (14 mothers and five fathers).

2.2.3.2 Procedures

2.2.3.2.1 Interviews

Individual semi-structured interviews were conducted with all participants during the training sessions. The interviews were conducted in Arabic, tape-recorded, and then transcribed in Arabic before being translated into English. Each interview session lasted between 70 and 90 minutes. At the start of the interview, the author, who conducted all the interviews, and who was the only person to listen to the participants and transcribe their interviews in order to ensure confidentiality, provided a brief outline of the study and explained her interest in the research question. The interview guide started with opening questions about the participants' backgrounds and their experiences in sports.

Esterberg (2002) suggests that the least threatening questions should be placed at the beginning of the interview and the more threatening questions placed

towards the end. This is so that any sensitive questions can be asked once a rapport has been established between the interviewer and the participant. This enabled me to establish a sound rapport with the participants, as the questions are not particularly threatening. I then proceeded to more specific areas of questioning involving enquiries into the participants' opinions and views of their involvement in women's track and field, as well as into the opinions of their significant others. Before the interview, summary sheets (the documents where comments were made while the interview was going on about the participants' personal expressions, including their tone of the conversation, their gestures, and composure, as well as the main points discussed) were kept in order to make it a complete interview. The flexible nature of the process and the individual responses of the participants resulted in interviews of differing lengths. On average, each interview lasted approximately one hour.

Following the interviews, and mindful of the points raised above with regards to the inductive analytical process, the author adopted the qualitative posture of 'indwelling' in that I became intimate with the points that were made by listening to the tapes several times, making notes, and jotting down my initial impressions. During this process, analytical memos were written, as preliminary connections were made between the theoretical concepts and the specific issues emerging from the participants' individual stories, and how these connected to wider cultural narratives. The analytical memos, along with the coding, helped shape the analytic process. This form of analysis is intended to examine the thematic similarities and differences between the accounts provided. The strength of this approach lies in its capacity to develop general knowledge about the core themes that make up the content of the accounts collected in the interviews, with a view of identifying the narrative segments and categories within it. In order to develop a plausible interpretation, categorical content analysis was used to investigate my data fully.

A content analysis allowed me to examine both the differences and similarities between the narratives of my participants. It would avail me the opportunity to gain greater knowledge of the reasons behind women's lack of participation in international competitions. Though the advantages of content analysis are many, it

also has its weaknesses. The over-determining or over-rating of core themes can lead to the ironing out of variation and the difference between the narratives. When this happens, it becomes impossible to appreciate the uniqueness of each of the narratives. The first stage of the content analysis is to assume – in line with a suggestion made by Esterberg (2002) – at which point the themes, categories, and patterns within the data began to emerge.

2.2.3.2.2 Observation

Observation is a very useful form of data collection because it unearths deep-rooted feelings during an interview that cannot be expressed with words, but may be revealed in the form of hand movements, fidgeting, or changes in the tone and volume of one's voice (Kumar, 1996). Therefore, during the training session, and before the interviews were conducted, I observed certain things pertaining to the field, equipment, and facilities; this included gender integration (whether male and female athletes trained together).

2.2.3.3 Data Analysis

After having listened to, and after reading my data in order to become intimate with the points that were made, I then undertook the process of coding. I began by using open coding, where there were no predetermined themes to be imposed on the data but, rather, there were themes that appeared from the text. This particular technique helps prevent the researcher from imposing his or her sense of what he or she thinks ought to be there in the data, even if it is not. After this process, I began identifying key themes and used the method of focused coding. Themes that were already identified in the open coding process were literally focused upon in this stage. Once this procedure is complete and theoretical saturation is reached, when the theory would have been properly explained, facts made and these points can be defended, the point of saturation has been reached.

2.2.3.4 Validity

In the current study, the focus is on the understandings and meanings of young Kuwaiti and Egyptian athletes, as well as on the views of their coaches,

parents, and administrators. This means that the data collected from participants during the analysis would then be interpreted to reveal and conclude the reasons that prevented Kuwaiti women from participating in international competitions. This would then be developed into a theory to display the participants' values and attitudes. The most important point to keep in mind is that one must have the ability to reflect the opinions of the participants involved in the study as indicative of the participants' own experiences.

2.3 2 Results and Discussion

The results will be discussed based on the similarities and differences observed between Kuwait and Egypt according to the participants' views. The participants are categorized into four groups: parents, coaches, administrators, and athletes. Results will be presented in two ways. First, a general overview of the responses from the Kuwaiti and Egyptian respondents in each of the groups will be presented. This will be followed by comparison between Kuwaiti and Egyptian respondents illustrated by quotes. They will be discussed in these groups due to differences in their ages, genders, and levels of experience. Initials will be used in the data below in order to protect anonymity. It should be borne in mind that the interviews were conducted in Arabic, and then the transcripts translated into English, so the translated words of the participants would have been interpreted. The overall results of the analyses are depicted in Figures 1 to 5 which give an overview of quotes and emergent themes obtained from Kuwaiti and Egyptian participants together. Tables 1 provides an overview of the similarities and differences between responses obtained from Kuwaiti and Egyptian respondents. The frequencies and percentages of quotes representing the first order themes obtained from Kuwaiti and Egyptian respondents are presented in Table 2.

2.3.1 Parents' Interviews: Overview

As discussed, parents can be a useful source of encouragement for women who are trying to become more involved in sport. Figure 1 shows that on an individual level, the family that a person belongs to can provide much encouragement. Individuals indicated that "both of us (are) encouraging her", when

asked about the role of parenting in sport encouragement. One was quoted as stating: “we encourage my daughter... because sport is useful.” Again, from the perspective of society, women’s sport is often considered to be “respectable” and “useful for girls”, as the girls that are involved in such activities are considered to be “sporty and enthusiastic.” In fact, many parents stress the importance of encouragement, due to the positive benefits that it can have on their children. With regards to athletes' current performance, many parents are trying to “improve their performance” and feel as though their encouragement has a “positive effect on (their) performance.” However, modesty and humbleness are also reflected in these quotes, with one individual stating that he or she aims to “encourage them and improve their performance.” On a more professional level, some parents strongly focus their attention on coaching their children as it is “very important to develop (their) performance.” Some were even quoted, when asked about their daughters, as saying how they “hope she qualifies to (become a) world champion” and they want to see their daughters become “world champions.” From a cultural attitude perspective, the function that cultural norms and gender integration (whether male and female athletes trained together) play on the encouragement of participating in a sport from a parent’s perspective is interesting to note. Some parents indicated that there was not an adverse effect of culture, insofar as culture “(does) not affect women’s exercise”, and gender integration exhibits “no difference between men and women.”

Conversely, the barriers that exist within this topic are also of interest to parents. Again, on an individual level, the family to which an aspiring athlete belongs may “reject sport participation.” Dated religious beliefs are also restrictive, as one individual was quoted that their “father refused due to the type of cloth”, presumably indicating that their father was referring to their sporting kit. A “family is separated between supporters and rejecters”, in many instances. On a grander sociological level, many “Gulf societies in general reject the idea” of including women in sport. Existing “costumes control women’s sport and affect it badly” in many societies. This ideology is often reflected upon the entire population, as the “majority (of) society does not support women’s sport.” In order to consider the

function of culture and how this can affect the likelihood of success, different opinions from various stakeholders need to be investigated. Some believe that “restrictions (should) be made before practicing women’s sport”, perhaps even ruling out the idea altogether by not “encouraging women to practice sport” at all. The “negative views upon women’s sport” remain prevalent among many modern societies. Even from a unifying perspective, individuals disagree on the role that females should play – one stating that they do not “prefer mixing between boys and girls.” In addition, “It is not allowed to mix between genders within Islamic society”, resulting in the general opinion that Islamic individuals should not “support that” when discussing female sport.

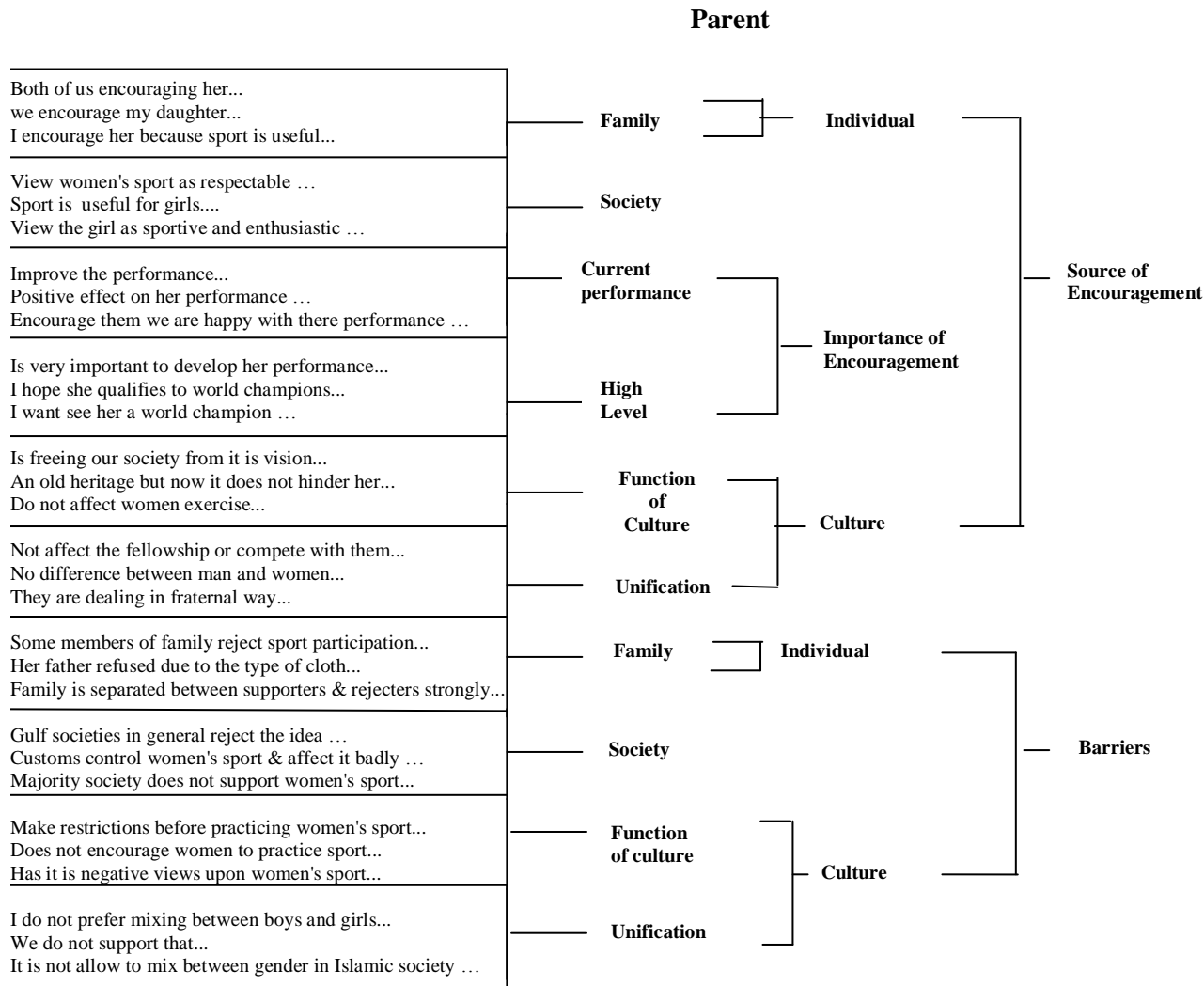


Figure 1 -
Qualitative analysis of interview data: the perspective of parents.

Parents' interviews: comparison between Kuwait and Egypt:

2.3.1.1 Role of the family

Among participants in this study, there were some cases where both parents accepted their daughter's sports involvement and encouraged them to continue in sports, and these cases corresponded with parents from both Kuwait and Egypt:

The parents argued:

"The family plays an integral role in motivating their girls in sports participation as this can promote and improve the level of players by giving them the needed encouragement and the chance to join sports clubs and train constantly" (M, Kuwaiti mother).

"Family encouragement is very vital as this propels the girls and brings out the best in them" (G, Egyptian Mother).

[Observation] During the interviews, I made analytic observations on the ways in which parents encouraged their daughters. I observed that most parents brought their daughters for training, watched while their girls were training, and took them home after their training sessions.

On the other hand, parental protection can be a barrier that contributes to the exclusion of females from sport participation. The fact that women are not participating fully in sports can be due to the structure of the society they find themselves in; this is in line with the work of Hargreaves (2007). For instance, among the participants in this study, there were some cases where some members of the athletes' families rejected their daughter's involvement in sports. These cases were more prevalent in Kuwaiti society, which is the opposite situation to the Egyptian families, who provided significant support to their daughters in sport.

Some Kuwaiti parents indicated:

"The family is separated into two parts; there are supporters that are ready to give their daughters full backing, while on the other hand there is a part that strongly rejects female sports participation" (Ta, Kuwaiti mother).

"My husband refused the acceptance of our female participating in certain sports due to the type of clothes that she may be expected to wear to take part in training or at the main competition." (SH, Kuwaiti mother).

"About the reaction of the family in female sports participation; some of them are in support of their participation, while others reject their participation in the championships, just because they are girls, and their religion does not allow them to travel abroad without being married to the person in whose company they would be travelling" (Hy, Kuwaiti mother).

It was evident that some members of the families' views differed from those of others, but the different reasons and views given suggest only one reason as to why there is a lack of Kuwaiti women's participation in sport.

2.3.1.2 The role of culture and customs

This is a broad field, which was why I covered two important aspects of the function of culture and gender integration that are relevant to women's participation in sports, as will be discussed next.

2.3.1.2.1 Function of culture

Most of the participants in this study had strong feelings when it came to their traditional beliefs; they also placed considerable value on tradition, which had a strong influence on their lifestyles (Hargreaves, 2007). This is common among most Arabic countries, with the greater impact affecting those within the Gulf region, which is where Kuwait is situated. On other hand, in Egyptian society, and although they share the same traditional beliefs as the Arabic countries, most of the participants felt that there was a need for a change in traditional values, and they did not feel too strongly about these beliefs. For example, some Egyptian parents indicated:

"I feel there is a difference between customs and tradition, sport is an acceptable custom, but what I feel that may affect our daughters is our long standing tradition of travelling in the company of a man, but as I said before this should also not be a problem as long as these girls

have learnt to respects themselves, yes... there should be no problem." (G, Egyptian mother).

"Customs and tradition: this has been our old heritage, but in this present era it should not be allowed to hinder the girls from reaching their peak in any field or career, even when it comes to sports, especially now that women have shown excellence in sports participation" (T, Egyptian mother).

"The role of customs and traditions towards girl sports participation is now seen as normal, and more girls are practicing sport in this era, contrary to ancient times, and there has been positive progress in womens' sport track records since 20 years ago, they are always improving." (M, Egyptian mother).

Most of the Kuwaiti participants in this study had strong feelings in the traditional beliefs of their society, and they placed considerable value on tradition, which had a strong influence in their lifestyles (Hargreaves, 2007).

For instance, most of the participants expressed their views in the same way in terms of things that had to do with their traditional beliefs, and which acted as restrictions on their daughter's ability to partake in sports. Examples are as follows:

"The Kuwaiti Society is still strongly adhering to its beliefs in customs and traditions when it affects our female children. We feel that if the girl wants to take part in the practice of any sport, the sportswear should be modest notwithstanding the uniform that is meant for that sport. Also I personally feel, I should be the one to take my daughter to the sports club, and watch her during training because of the environment that may allow her to train in a group (mixing) which may lead to her being allowed to mix with both genders. These procedures do not mean that I doubt my daughter's behaviour, but it is trying to adhere to the customs and traditions of my people. Also I have to accompany her when she needs to travel abroad in order to attend any international championships. So you see it is very difficult." (W, Kuwaiti father).

"The customs and traditions have made so many restrictions in normal living, even before the era of our females ever thinking of participating in woman's sport, so the views may change but it will take a while" (F, Kuwaiti mother).

2.3.1.2.2 Gender Integration

Most Egyptian participants view gender integration as the greatest obstacle they have had to overcome when it comes to their full involvement in sports and in their normal day-to-day life activities. On the other hand, Kuwaiti parents do not see it as normal; the Kuwaiti society is not used to this, especially within the sports environment. Some mothers of Egyptian female athletes commented that:

"Integration between boys and girls has no negative effect on our daughters because of the rightful education the girls have been given." (Ma, Egyptian mother).

"Mixing of male and female in sports doesn't cause any problem, as it exists everywhere around us, like in the schools and other public organizations/functions as long as these females have good educational and awareness, then there is no fear of them mixing with the males" (O, Egyptian mother).

"Mixing males and females does not affect the fellowship they have nor does it deter them from competing among themselves; which in a way brings out the positive aspect of the children generally" (So, Egyptian mother).

It was observed that the Egyptians allowed the male and female athletes to train together on the same track; this gave the female athletes the freedom to mix with their male counterparts. During the course of training, there were times when the male athletes had to assist the female athletes in certain areas of their training; they were free to share their views on their training, and they also trained with male coaches. [Field note].

There are some cultural rules that have been laid down that affect women in general. One such rule is that against men and women working together or carrying out activities together; this has also affected women's participation in sports, which has now affected their featuring at international competitions. Therefore, this lack of gender integration, according to Pederson (2002), is a major problem. Most of the Kuwaiti participants feel that this has an adverse effect on them, and their male

counterparts share in this particular feeling as well. Kuwaiti parents strongly refused to allow gender integration:

"I cannot agree with mixing of males and females because it is against Islamic law." (D, Kuwaiti mother).

"I don't encourage the mixing of males and females at championships or even at training, because in all the sporting events that we hear about or watch, we have not watched a championship that involves both genders. Therefore, we find differences in the way females are treated but when it concerns the males, they should be treated differently because they have been there for a long time, therefore we cannot compare a particular game that has been accepted for men to be practiced, to be practiced by women on the same terms" (N, Kuwaiti mother).

"In Kuwait, I do not recommend the participation of females and males in sports participation, because our customs and traditions do not allow this mixing to take place. Our kids are not accustomed to that, because I feel that the woman will not have the freedom to express herself when she participates in sport with males in the same field of the sport. She may feel that the male is somehow stronger and more superior to her." (M, Kuwaiti father).

[Observation] However, during my data collection in Kuwait, I observed that although all the athletes train together on the same track in Kuwait, the female athletes are overprotected and prevented from mixing with their male counterparts. It was obvious that it was the job of the administrators to always be around to ensure that the female athletes do not mix, as though they were afraid or worried that if they mistakenly mix, something was sure to go wrong.

2.3.1.3 Importance of Encouragement

This key theme is divided into two main ideas: current and high-level performance. These are the factors that are relevant to the athlete's current/present performance that would motivate them to reach a higher level.

2.3.1.3.1 Current performance

The importance of family encouragement is to help their daughters be successful in sport performance, and to determine how they could help their daughters improve in their performance (Rees, 2006). This was evident both in Kuwait and Egypt, and this is an outstanding similarity within these two Arabic

societies. While this factor can positively influence continued participation in regular physical activity, the largest determinants of change in activity over time were found to be the parental resources for supporting activity (e.g., this has to do with transportation to and from training, providing pocket money, and the provision of basic amenities that would help in training and sports competition, just to mention a few).

"Family encouragement has a positive effect on the female as this may improve the sporting performance and ability of the girl" (Ta, Egyptian mother).

"Family supports consolidate our daughters through obtaining the best results and giving them the chances of having the proper training they require that may help them to qualify for international tournaments. As long as this support does not have any negative effect on their education we will be there for them" (No, Kuwaiti mother).

"Family support has an integral effect on our daughter, because it will help her in promoting her skills, thereby she will be able to gain access to the highest levels in sport." (Da, Kuwaiti mother).

2.3.1.3.2 High-level performance

From this perspective, parents hope that their daughters will reach a high level, and they would like to support their daughters so they can have great chances in their sports careers in the future. It would seem appropriate for both parents to encourage their daughters to engage in sports because this will save their daughters the stress of having to participate in sports without the appropriate support and encouragement from their close relatives. Knowing that their parents are in full support of their participation in sports will also guard against the girls being unruly once they are outside their homes. Parents also shape a child's psychological development through their involvement in their child's athletic experience (Côté & Hay, 2002). The next generation may be influenced by what is happening now, because most of the younger participants are already preparing their minds for the future. Since it is a lifestyle, these athletes have embraced, as children, the idea that they are prepared to respect it (Hall, Slack, Smith & Whitson, 1991). From this view,

parents in Egypt had a different view from Kuwaiti parents, who do not allow their daughters to reach the international scene. Egyptian parents argued:

"Praise be to Allah, she was excellent but due to hard luck, she was not exceptional, last year due to some emotional reasons, which made her come forth in the world and the first within the Arab nations, and praise be to Allah I wish she had taken the gold medal in the world" (G, Egyptian mother).

"World competitions: if it is Allah's will, they will get to the top within the republic and even at world championships" (M, Egyptian mother).

"I hope my daughter wins at the world championships in the future." (H, Egyptian mother).

Whereas Kuwaiti parents argued:

"I do not wish her to reach the world championships, and she had better take care about education and religion" (M, Kuwaiti mother).

"No, but I don't think that will be possible, not due to not trusting my daughter's level but because the conditions create the obstacle in her way which prevent her from achieving this level." (Al, Kuwaiti mother).

2.3.2 Coaches' and Administrators' interviews: Overview

Sources of encouragement are of particular importance when addressing sport and exercise participation. Figures 2 and 3 show the subsets of these sources of support that were derived from the interviews with coaches and administrators, indicating the importance of encouragements for athletes' participation in sport from an individual level (i.e., the parents), as well as from society and culture. On an individual level, the role of parents in encouragements on their daughter's participation in sport performances from coaches and administrators view, as they are common sources of motivation throughout adolescence and developmental childhood. Coaches and administrators stated the importance of parents' encouragement on athletes' participation in sport by saying "exercise or sport (is) to achieve a good result." Additionally, their role is to "improve the performance of

athletes”, therefore eliciting a sense of worth and value to their profession. Furthermore, recent improvements in sociological situations across the world have highlighted the need for “encouraging females to exercise.” Continuing on from this sociological perspective, it should be noted that the “view of women’s sport in Egypt (is) better than (in other) Arab countries.” Female athletes in “Arab sports are held in the highest esteem.” “Women’s sport is respectable and (society should) encourage them.” On a larger cultural scale, different attitudes exist with regards to the roles of female athletes. For example, coaches and administrators were quoted as stating that the function of culture “did not delay women’s participation in sport”, nor did it “reject their participation in sport.” Ultimately, the sports were “not affected”, illustrating the idiocy that surrounds outdated sexist ideologies. With regards to unification, sport can provide a substantial opportunity to “generate the spirit of competition.” Such sportsmanship is “normal and does not affect their performance”, nor does it “reduce their participation in sport.” These opinions highlight how there are many different sources of encouragement across a range of different levels, all of which emphasise the coaching and admonitions elements of sport participation.

Conversely, there are many barriers to encouragement that exist within this topic, again falling into a range of different categories and classifications. From a social perspective, female sport is often considered in a “marginal view.” This is commonly attributed to the fact that there is a “lack of interest from the media”, resulting in the attitude that many people hold, whereby they “refuse women’s sport.” The government is also a body that has much influence on this topic. When considering the policies that exist in this paradigm, many people stated that they “know of none”, that they “don’t hear about female policies”, or that they believe “there are no government policies” with regards to this issue. Furthermore, larger organisations should be addressed for their role in encouraging female sport. Statements have been made claiming that “there are no organisations supporting women” or “encouraging women”, emphasising how there are “no organisations at all” that focus their attention on this topic. From a facilities perspective, many individuals have expressed how such facilities are not “available at all clubs” or that

they lack the “modern facilities” that are necessary to encourage sport. Also, people have claimed that these facilities may be available, but that they may “not be (of) a high degree”, further emphasising the lack of interest in the female sporting industry. Similarly, when considering the equipment that is available to aspiring athletes, it should be noted that “not all (equipment) is available”, that they “need to be updated”, or that there “is not enough.” In a stark contrast to how a culture can be a source of encouragement, it should be recognised that it can be detrimental as well. There are many “caveats in women’s participation”, ultimately resulting in a negative effect on “women’s participation” in sport. Conclusively, this results in a negative effect upon “women’s sport” in general. Even the strength that unification can have on encouraging one’s participation in sport is somewhat diluted, as people feel as though it is not “normal” or “usual” for women to play sport in their societies, which is “partly (due to) a lack of participation” overall.

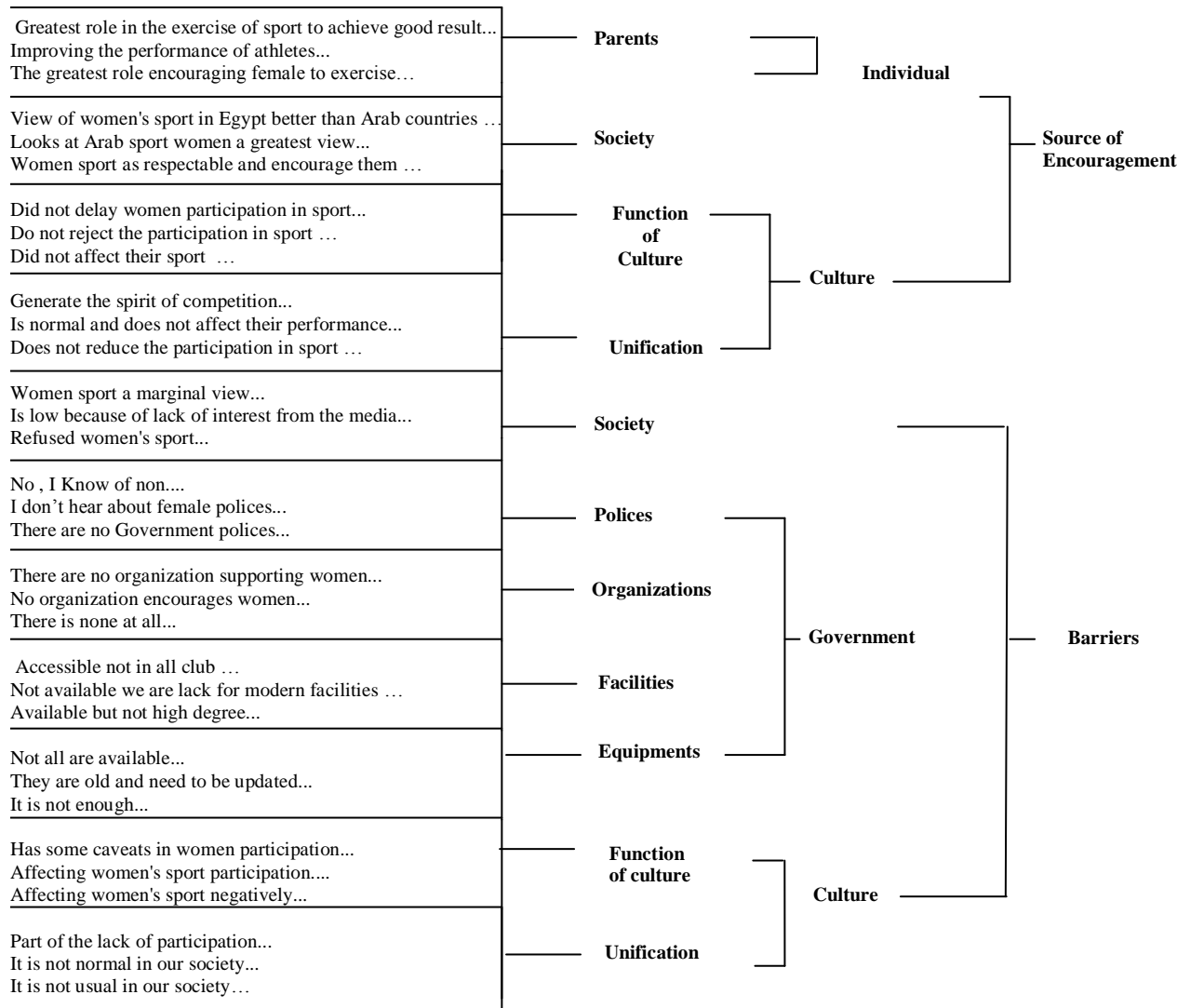


Figure 2 - Qualitative analysis of interview data: the perspective of coaches.

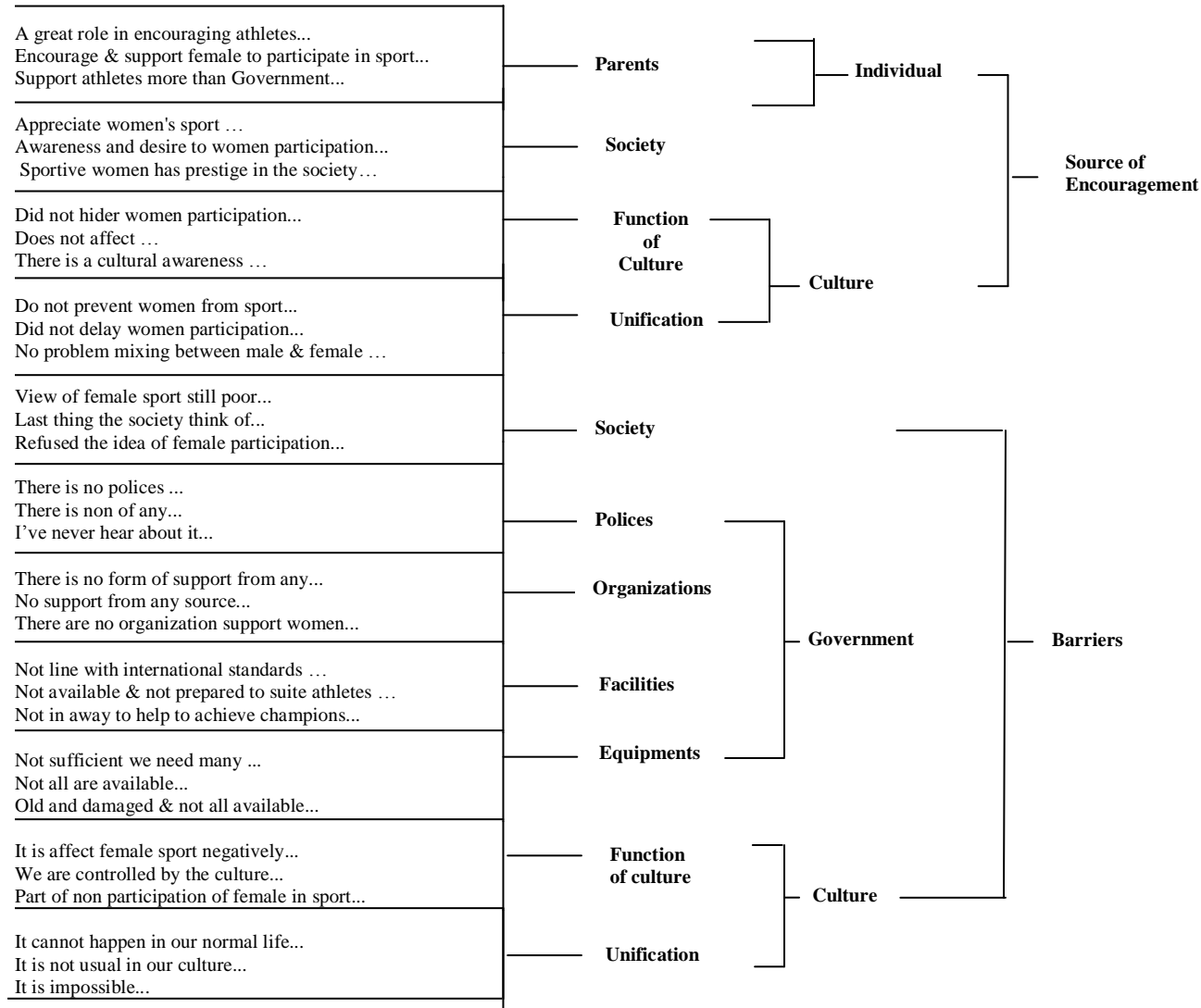


Figure 3 -
Qualitative analysis of interview data: the perspective of administrators.

Coaches' and administrators interviews: comparison between Kuwait and Egypt:

The coaches' and administrators' views were different in terms of the parental influences on athletic performance by virtue of their expertise in this area. I will interpret the differences, as well as the similarities, between the Kuwaiti and Egyptian administrators' and coaches' attitudes towards females' sport participation.

2.3.2.1 The role of the family

The importance of parental support, as it influences athletic performance, cannot be overlooked or underrated. Therefore, most coaches indicated that it plays the greatest role in sports development, as it helps athletes to achieve positive results (Rees, 2006). This view was accepted by coaches and administrators from both Kuwaiti and Egyptian societies.

According to the participants:

"Family has great importance in encouraging their female daughters in any game they are involved in" (I, Egyptian coach)

"Family plays a very important and a great role in improving the performance of athletes through providing material and moral support to the daughters." (H, Egyptian coach)

"The family is very important in enhancing the athletes' performance" (AL, Kuwaiti coach)

"Parent support is a significant base for athletes as this propels them to a higher level of performance in sports participation." (Li, Kuwaiti coach)

"I feel the family plays a role in encouraging females to play and supporting them in terms of psychological morale factors, but for strengthening their physical and athletic position, proper infrastructures have to be put on the ground" (G, Egyptian administrator).

"The families certainly have a significant role in encouraging and supporting their children." (MH, Egyptian administrator)

"Family encourages athletes strongly, that is why these athletes attend all their training sessions diligently and also attend competitions when possible." (T, Kuwaiti administrator).

2.3.2.2 The role of society

In most societies participation in female sports is accepted and considered respectable. In addition, females are encouraged to engage in sport participation freely, just as their male counterparts are encouraged. According to Greendorfer (1993), we are socialized into a particular gender role from birth, according to our physiological characteristics, and “this plays a key role in integrating individuals into society by transmitting cultural values and traditions from one generation to the next”, as presented in the previous chapter.

Those in the Egyptian community have more awareness of the importance of female participation in sports than do those in the Kuwaiti community, who decline or refuse the free participation of women in sports. The view of Egyptian participants is reflected, as follows:

"Though this is my first time staying in Egypt, I observed that there is so much support in the form of encouragement in female sport participation. And I learnt that it has been going on for a long time though in other Arab countries it is just starting to gain ground." (I, Kuwaiti Coach in Egyptian)

"Society's view of women's participation in sport is somehow better in Egypt than in other the Arab countries, this is because women in Egypt were given the liberty to participate in sports so many years ago." (M, Egyptian coach).

"In Egypt the society looks at Arab women participating in sport with respect." (Mo, Egyptian coach).

"The community's views on the participation of women in sports differ from the ancient times, and in this era we see it as been a beautiful contrast to the past. We find awareness and increased desire of females to participate in sports in Egypt and foreign competitions as beautiful and acceptable." (SA, Egyptian administrator).

"The community's view on female participation in sports has changed tremendously; the male participating in sport accepts and respects the female who also participates in sports" (E, Egyptian administrator).

"The community's view on women participating in sports is different from the past; the male athlete appreciates them and views them with positive prestige." (A, Egyptian administrator).

In contrast with these views from the coaches, some Muslim societies feel that female athletes have to create and maintain apologetic displays of femininity in order to be accepted and allowed to participate in sports. This can be seen in Kuwait in the dominance of the male group over the female, especially as it relates to sports. Due to the hegemonic interpretation of sports in Kuwaiti society, there is a lack of support for females participating in sports, which translates into not providing the basic amenities and facilities for use by Kuwaiti females in any given society in Kuwait; this, in turn, affects females' participation in sports.

The majority of Kuwaiti coaches and administrators indicated:

"In Kuwait our society restricts our women from participating in sports and if they were to allow participation in any sport their supervisors or officials must be females, examples of this are seen in track and field. For instance they must engage the use of female track judges, female stewards and female umpires to officiate in all their track and field events, this must be observed before females are allowed to feature in that competition" (Al, Kuwaiti coach).

"The society in Kuwait looks down on females that participate in sports, I noticed this because as a male coach, people keep asking me why am interested in training female athletes, especially as I am not a female. They feel it is only the female that should train the female athletes" (Mh, Kuwaiti coach).

"Society's view on women's sports participation is low because of the limited publicity and lack of interest from the media in creating awareness in this angle." (Li, Kuwaiti coach).

"The society has been against the idea of female sports participation" (Ab, Kuwaiti administrator).

"Female sports participation? No, this is the last thing the society thinks of, they are not interested in it" (K, Kuwaiti administrator).

"Initially the society refused the idea of female sports participation, we faced refusal from different authorities, like the Government, Islamic leaders and the general public, but we are still trying to create awareness, so they have partially accepted and are trying to help the female, though the support is still not felt, as it is not enough." (Hu, Kuwaiti administrator).

2.3.2.3 Culture

The role of culture is really a wide area to cover; therefore, I will introduce two aspects that relate to the function of culture and gender integration.

2.3.2.3.1 Function of culture

There is a unique way in which culture controls individual behavior, especially one's cultural thoughts, attitudes, and gestures/ movements. To be more specific, the differences between the Kuwaiti and Egyptian communities' views on the female participation in sport were due to their different cultural orientations.

The Egyptian coaches' and administrators' views were as follows:

"In Egypt we feel that Arab customs and traditions don't deter women's participation at local and international competitions." (Mo, Egyptian coach).

"Customs and traditions in Egypt, that we are exposed to, don't affect women participation in exercise or sport." (N, Egyptian coach).

"Well our tradition rather than it affecting our female sports participation, it is really encouraging them in sports participation in both the local and international scene." (I, Egyptian coach).

"The cultural awareness about women's participation in sport is different from that of the past, considering the fact that now there is a great deal of encouragement towards women's participation in sports." (A, Egyptian administrator).

"The cultural awareness of women's participation in athletic games is excellent in Egypt, and this is remarkable as females are given the same encouragement that families give to their sons." (S, Egyptian administrator).

"We see that there is so much encouragement given to females that participate in sports in Egypt, as our customs and traditions do not have laws that go against it" (F, Egyptian administrator).

Given these views, it is likely that traditional values are now being subjected to individual ideas, whereby parents decide what they should teach their children, and as these children grow up, they decide whether they should continue or change

their beliefs. An example of this is the daughter of the Kuwaiti royal household, Dina Al-Sabah, who was brought up in the Western way. She now upholds her idea of tradition by living in the Western world and doing what she thinks is right, but she still observes the Islamic religion (Hargreaves, 2007: 94). Therefore, it is likely that the culture still exerts a strong influence on females, but hopefully in the future, this level of control will be reduced and women will have the same rights as their male counterparts.

As discussed earlier, Egyptian society is free from the control of culture on their teaching and lifestyles. Conversely, the Kuwaiti society is not fully informed in that they do not have enough information when it comes to culture, particularly in sport performance as it affects females. This has to do with women's freedom to participate in sports as individuals.

Most Kuwaiti coaches indicated that:

"In Kuwait culture is really affecting women sport participation as they are not accorded the respect which is given to their male counterparts in the sporting field." (Li, Kuwaiti coach).

"The culture in Kuwait affects us negatively in practicing sports, especially when these females grow up and become aware of their bodies as adults before they are allowed to participate in sports. This limits their performance in sports and is not encouraging. As females who start sports as adults cannot cope as well as those that started sports in their tender ages." (Mh, Kuwaiti coach).

"In Kuwait we have certain caveats when it comes to women's participation in sports and these will take some time to be modernized for it to suit female sports participation." (Al, Kuwaiti coach).

"Our culture does not support females to participate in sports, they are not considered to be allowed to go for training, not to speak of their attending world championships." (K, Kuwaiti administrator).

"We should try and influence the culture of our country, so that female would be allowed to participate in sports." (T, Kuwaiti administrator).

"Culture affects female sports participation in a negative way." (Mo, Kuwaiti administrator).

2.3.2.3.2 Gender Integration

Due to cultural thoughts on gender integration in sports, this was seen as a point that had different reactions from participants from Kuwait and Egypt, which is a result of their culture as well as the community, this was evident among the Kuwaiti and Egyptian participants. The coming together of males and females to participate in sports is seen as normal in Egyptians society.

Most Egyptian coaches and administrators argued:

"In Egypt we feel that mixing of males and females in general generates a spirit of competition between the two genders which in turn brings out a positive impact on the performance of all the athletes, male and female alike." (N, Egyptian coach).

"Mixing between males and females in Egypt is normal and doesn't affect them negatively in their performance at competition either at local or international levels." (Mo, Egyptian coach).

"Mixing between males and females on the pitch does not reduce the participation of women in sports, and the coach's role to create an atmosphere of commitment and respect between the sexes is also respected and accepted." (H, Egyptian coach).

"There is no problem of mixing between male and female in sport; it is okay for them to mix." (G, Egyptian administrator).

"Mixing of males and females does not limit the participation of women in the World Championships and as long as there is a mark of improvement in women participation in sports, we will still keep persuading women of the importance of exercise and the need for them to do athletics." (M, Egyptian administrator).

"Integration between boys and girls in world competitions does not reduce women's participation in sports, rather it gives them motivation and creates more awareness in the Egyptian women and zeal to participate in athletic competition and we see their mixed participation as normal." (Sy, Egyptian administrator).

In contrast with the Egyptian community, Kuwaiti society is not happy with the idea of gender integration in sports. The coaches and administrators had this to say on this issue:

"Part of the reason for the athletes' non-participation in sport originated from not accepting integration as integration is something that the community has not fully embraced, therefore this is a big problem." (Mh, Kuwaiti coach).

"It is not normal in our Kuwaiti society, it sounds strange" (Li, Kuwaiti coach).

"It is not usual in our country; we feel that it is religiously wrong" (Al, Kuwaiti coach).

"I think this may affect female athletes' participation in sport as this is a new invention in Kuwaiti society" (K, Kuwaiti administrator).

"Since integration cannot happen in our normal society, as it is not our lifestyle, it may be seen as strange when it happens in sports environments" (Mo, Kuwaiti administrator).

Therefore, it would seem that although there has been a great change in the general way of life of the Kuwaiti people, it has not affected the integration process, and a change in female sports participation, as well as in general society, is long overdue.

2.3.2.4 Government

Governments are supposed to provide a convenient sporting environment for their athletes. This includes having sports policies for female athletes, organizing sports clubs for females, providing facilities and, finally, providing equipment for female athletes. If these resources are available, it will help female athletes in improving their performance.

2.3.2.5 Policies

The government has been strongly in support of sports, although its emphasis has been and continues to be on the male sports. During this study, it was noticed that many sports policies, insurance, and other benefiting policies are centered on the males in sports, as indicated in the literature (Hargreaves, 1994). The Government of Kuwait and Egypt have not yet come up with policies that will be of benefit to female athletes. Most participants in the study agreed that the government is not supportive of females in sport. The following are examples of coaches' expressions from both countries.

"There is no policy in Egypt that supports women's participation in sports; therefore it is difficult for us coaches to motivate these athletes without such support from Government" (H, Egyptian coach).

"There is no government policy that support women's sport participation in Egypt therefore the job is done between the parents, the coaches and the administrators individually" (H, Egyptian coach).

"There is no government policy that supports women's participation in sport in Kuwait, and to think of it, we have just heard about such things as sports policies for women in this present era, it was never done" (Al, Kuwaiti coach).

"In Kuwait there is no Government policy supporting females not only in sports participation but also in participation in all other fields or careers in our society" (Mh, Kuwaiti coach).

The majority of administrators indicated:

"There are no policies that support women sports participation although there are a lot for their men counterparts" (A, Egyptian administrator).

"There is no encouragement that comes from government that is geared at encouraging female participation in sports" (M, Egyptian administrator).

"There are no policies that are made in favour of females participating in sports and this make me feel really sad"(Hu, Kuwaiti administrator).

"Though in the beginning, there was none but presently they have started considering it "(T, Kuwaiti administrator).

2.3.2.6 Organizations

The effectiveness of the organisation supporting female performance in sport is important, as there will be a great impact on their sporting career. Actually, both Kuwaiti and Egyptian coaches and administrators saw that there were no such organisations in support of women in sport. Most coaches said:

"There are no Governmental organisations that support associations/clubs in Egypt supporting women sports participation,

and athletics is one of the sports lacking such support." (H, Egyptian coach).

"There are no Governmental organisations that support associations/clubs encouraging women's participation in sports especially in athletics events in Egypt due to the uniform/outfit used in training and competing." (N, Egyptian coach).

"There is no such thing as organisations or associations involved in female sports in Kuwait" (Mh, Kuwaiti coach).

"No Governmental organisations that support associations/clubs in Kuwait that support women sports participation in Kuwait. The people of Kuwait are just gaining awareness that there is a need for it now"(Li, Kuwaiti coach).

"There are no Governmental organisations that support associations/clubs that support women's sports, only private associations and clubs owned by individuals. This makes them not effective enough." (G, Egyptian administrator).

"There are no organisations that support women's sports" (A, Egyptian administrator).

"Initially there was no support from any source, but seeing that the females are improving positively they have started giving them support and I am sure as time goes on this support will increase though with time." (Ab, Kuwaiti administrator).

"There is no form of support for female sports organisations." (Ab, Kuwaiti administrator)

2.3.2.7 Facilities

The Government has made a huge investment in sports, but mostly in favour of male athletes (e.g., establishing special tracks for males, but not for females; providing expert coaches and equipment for males), and data from this research revealed that female athletes in general were highly in need of facilities provided for women. In addition, these facilities were most times inadequate in both Kuwait and Egypt. The coaches from Kuwait and Egypt had this to say:

"Possibilities of attaining good results are not made available to us in Egypt though we go an extra mile as coaches and try to obtain these results over a long period." (N, Egyptian coach).

"In Kuwait facilities that are available are not perfect; as the females are made to train with male facilities, as they see no need to provide facilities for the female, whereas in track and field women need special facilities to train especially in field events." (Mh, Kuwaiti coach).

"In Kuwait these facilities are perfect for male athletes, but they are not suitable for female athletes because the female athlete needs special specifications as it suits their events. And proper measurements in equipments like Javelin, Discuss and short put weight to suit the female athlete." (Al, Kuwaiti coach).

"The facilities at times are made available, though most times they may not be in line with international standards" (G, Egyptian administrator).

"The facilities for the female athletes are not legal; there is only one legal stadium for throwing events which for field events in track and field" (M, Egyptian administrator).

"Funding is not enough and every other thing required to support the female is lacking. Therefore, we need everything that will help them to perform well especially the provision of tracks"(T, Kuwaiti administrator).

[Observation]The facilities are generally not commensurate with international standards; also, many athletes use the tracks at the same time, which inevitably affects the training sessions and the overall performance of these female athletes.

2.3.2.8 Equipment Equipment is a vital need in any training session, because it is not possible to have proper training without equipment. It is, therefore, necessary for the Government to provide the necessary type of equipment to each of the clubs that are involved in the training of female athletes. Most of the participants from Kuwait and Egypt share the same view that the equipment they are exposed to is either not sufficient or outdated. The coaches argued:

"The tools we are using for training in Egypt are old and need to be upgraded" (Mo, Egyptian coach).

"Most of the important training equipment is not available in Egypt for training females, so we have to make do with what we have." (H, Egyptian coach).

"In Kuwait the equipment is limited in number, compared to the number of athletes involved in sports participation, whereas their male counterparts have enough and to spare." (Li, Kuwaiti coach).

"I think the equipment we have is not enough, so we need more equipment to improve the training standard of our athletes especially if we expect good results." (Mh, Kuwaiti coach).

"The equipment is available for some sports, except those sports that require special equipment to be used before they can achieve good results at championships." (E, Egyptian administrator).

"The equipment is not sufficient and we need lots of equipment of various shapes and sizes." (Sy, Egyptian administrator).

"Females need special equipment which is not available, so they make do with the ones used by the boys that most times are unsuitable for girls" (K, Kuwaiti administrator).

"Funding for females is not enough, and these female athletes require equipment that is suitable just for them" (Hu, Kuwaiti administrator).

[Observation] It was observed that there was enough equipment suitable for male athletes, and the equipment was of a good standard, but female athletes require equipment that is designed specifically for them, so that they can cope with training. An example of such equipment used in field events includes equipment for shot-put and javelin events, to mention just a few.

2.3.3 Athletes' interviews: Overview

The athletes themselves are of particular importance when discussing this topic, as they are the primary stakeholders that are affected by either encouragement or discouragement. Figures 4 and 5 show that the sources of encouragement for athletes fall into similar categories as for the other stakeholders. Parents are often considered as "sources of encouragement", and athletes often refer to the "mother" in particular, as well as to the "family" in general. From a

societal perspective, athletes feel as though “society appreciates the sport women”, leading to the development of “community views (where) sportive girls become acceptable.” One individual was quoted stating that “Society appreciates the sports woman.” Schooling systems can also provide an educational attitude towards the sources of encouragement. Many athletes feel as though their “P.E. classes really motivated (them) to becoming an athlete”, often suggesting that the subject has “helped (them) a lot.” Cultural perspectives should also be considered when addressing athlete-oriented sources of encouragement. The function of culture can be particularly encouraging for athletes, as the “Customs towards sportive girls (are) becoming normal.” Many feel as though these customs “did not prevent (them) from participation”, and that these “cultures do not lessen from women’s participation.” On a grander level of unification, cultural attitudes can help to encourage athletes, as the role of women in sports “has no effect, because of rightful education.” The integration of women into the sporting industry in such countries “does not affect women’s participation” as it is “normal.” Many married female athletes were quoted as explaining the role of their husbands in their sporting participation. They stated that their husband “knows (they) are into sports before marrying”, therefore expecting them to “encourage” and “persuade” their involvement in sports. Some were even quoted for stating that they would “not allow (their) husband to stop them from participating.” However, the dichotomous nature of this situation reflects how many sources of encouragement may also be detrimental. From a societal viewpoint, many female athletes felt as though they were not accepted within society, making them believe that they were “doing something wrong.” They felt as though “society (did) not appreciate them as sport people”, with only “some people accepting” their professions. Interestingly, some individuals felt as though their schooling played a less significant role in their success, stating that their “P.E. class did not motivate” or “help” them to become an athlete. Some were even quoted as saying that their “school physical education had no effect” on their success and overall well-being. Again, the government stands as a substantial body that can enforce bureaucratic regulations to restrict the development of the female sporting industry. There seem to be “no laws” or “policies” to “encourage” and “support women’s sport”; these attitudes are reflected in the organisations, or lack thereof,

that do not “provide any support” or “encouragement” for aspiring female athletes. There also appears to be a lack of appropriate facilities for athletes to train in, with many individuals stating they are “not good enough” or not “suitable” for their needs. Similarly, the equipment that is available for athletes to train with is considered to be “not adequate”, or not functional enough “because all athletes use them together.” “The cause of this problem is cultural”, as outdated cultural norms persist within this dynamic industry, suggesting that “females should not train in the same venue as boys.” Furthermore, many athletes feel as though “unification is part of the problem”; in addition, it restricts them from “partaking in international events.” Many hold the view that “unification is not acceptable in (their) country.” Interestingly, some married female athletes held different viewpoints towards the role that their husbands played in their profession, stating that if their “husband does not like the idea, (they) will stop.” These decisions “depend on the husband”, but in many cases, if the husbands “say no, then (they) will stop.”

Athletes

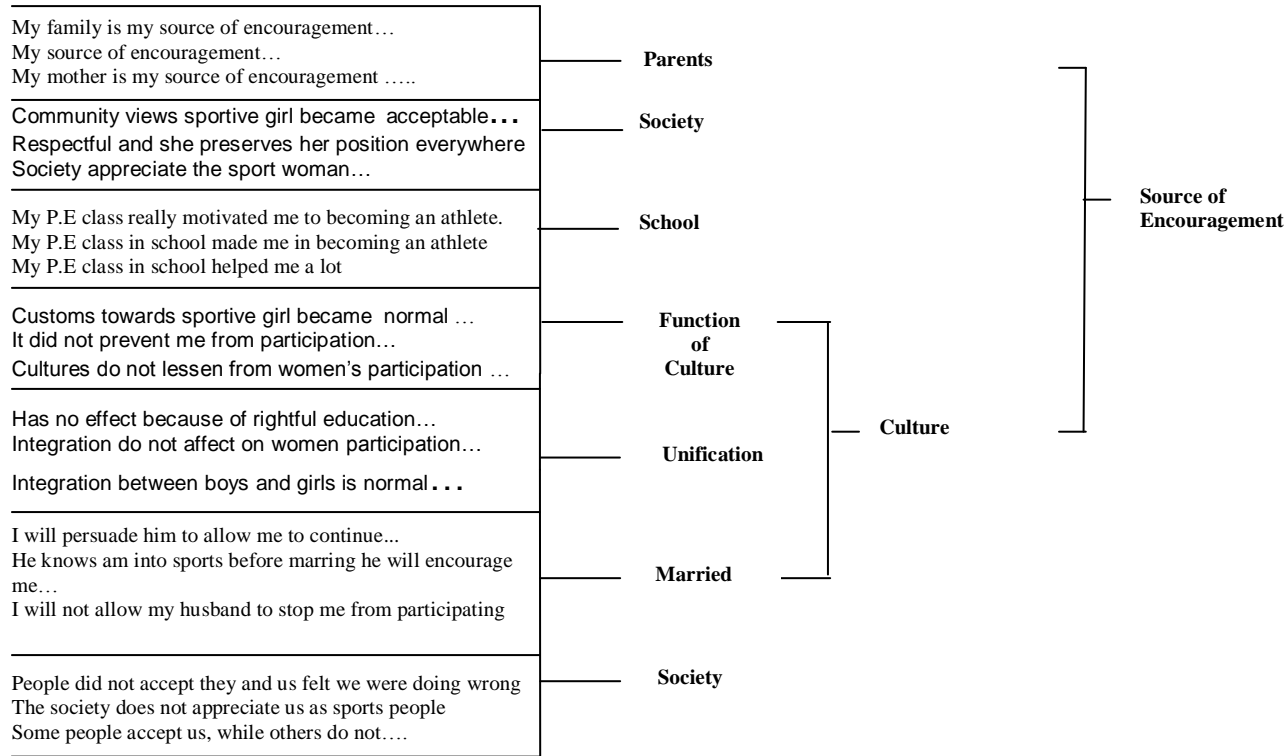


Figure-4 -
Qualitative analysis of interview data: the perspective of athletes.

Athletes

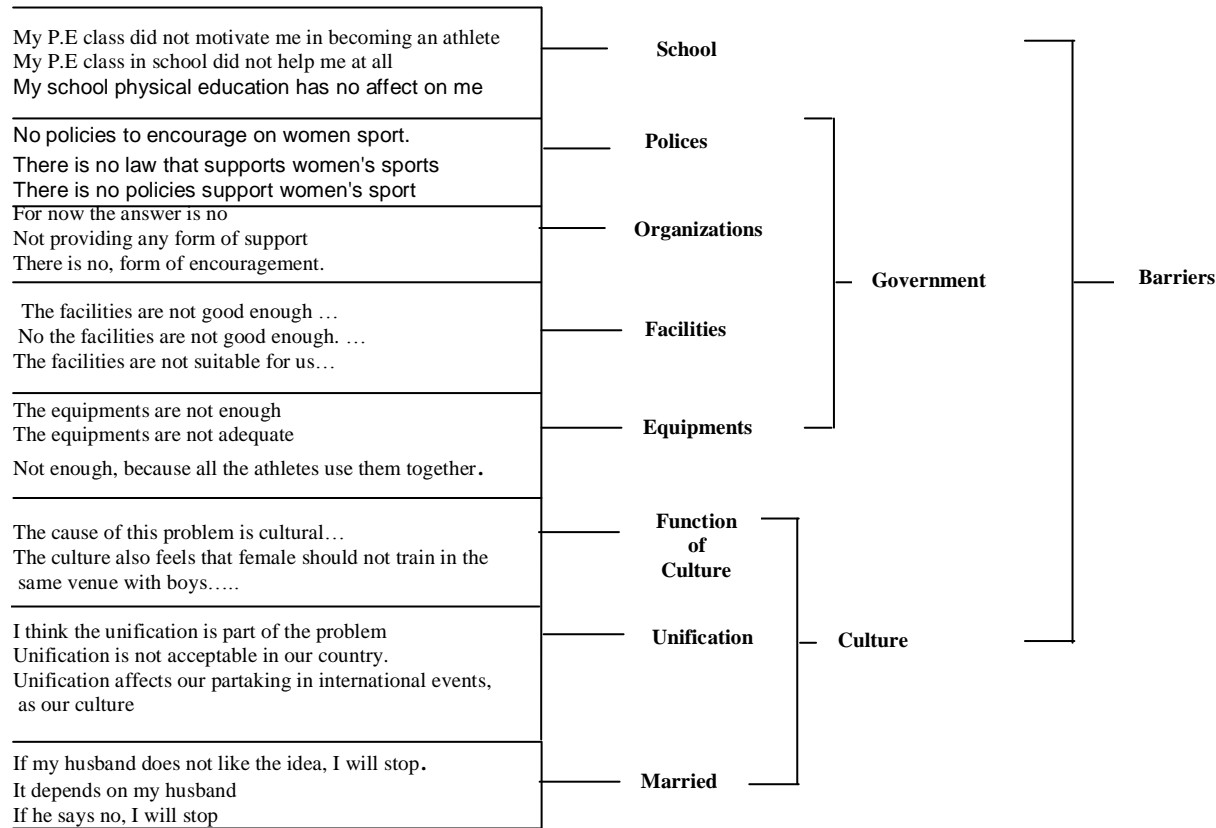


Figure 5 -
Qualitative analysis of interview data: the perspective of athletes.

Athletes' interviews: comparison between Kuwait and Egypt:

2.3.3 .1 The role of family

Most Kuwaiti and Egyptian athletes saw that their family members are a strong source of encouragement for their participation in sports, as family members are the ones that encourage these women to perform well and to continue in sports participation. Athletes argued:

"My family has played a big role in allowing me to participate in sports, helped to improve my performance level in sports and they have really encouraged my spirit of competition" (T, 18, female Kuwaiti athlete).

"My parents are my main source of encouragement"(F, 18, female Kuwaiti athlete).

"The family has a great role in encouraging me to continue practicing sports" (N, 19, female Egyptian athlete).

"My family has played an important role in developing my performance, both in training and competitions" (S, 18, female Egyptian athlete).

2.3.3.2 Society

The society as a source of encouragement actually depends on each individual's awareness of whether society accepts female participation in sport. Different attitudes were portrayed by the Kuwaiti and Egyptian society regarding women's sports participation, and the views of the athletes were as follows:

"The Egyptian society looks upon the female athletes with admiration; they are always encouraging us to partake in sports." (SH, 18, Egyptian athlete).

"Our Egyptian society's version of a female athlete is the consideration of respect, and honour which pushes us to make us perform well" (Mo, 18, Egyptian athlete).

"I think the Egyptian society has the consideration in improving women's sport and the appreciation of woman, while in other Arab societies, some of them feel that a woman has no right to exercise in any sports and any other career." (S, 18, female Egyptian athlete).

On the other hand, most of Kuwaiti athletes argued that the society does not support women's participation in sports. Initially, some people accepted their participation in sports, though the percentage was small, whereas most of their social networks rejected the women's participation from the onset.

Kuwaiti athlete participants had this to say:

"Our Kuwaiti society does not appreciate or respect us as sportswomen; rather they look at us with disgust just because we are participating in sports" (M, 18, Kuwaiti athlete).

"From the beginning people did not approve of the idea of our participating in sport" (Hn, 17, Kuwaiti athlete).

"The society does not accept us, because they feel that sport is meant for only men. In addition, we face obstruction from different aspects in our society, just because we are into sports." (F18, Kuwaiti athlete).

2.3.3.3 School

Education is one of the key sectors that can also be used in encouraging sports participation among females. Whilst the some of the female athletes felt that their schools had an impact on their sport performance due to the physical education classes they attended as children in school, a few participants were among those that argued that their schools did not encourage them to engage in sport performance. Examples are evident in the following passages:

"My P.E. classes in school motivated me to become an athlete, and I so I participated in school sports. I usually came out top in these competitions and in my academic studies." (A,17,Kuwaiti,athlete).

"My P.E. class in school influenced me to become an athlete, and helped me in discovering my talent in track and field events." (Hn, 18, Kuwaiti, athlete).

"The subject of physical education has really helped me lot to be a player." (Sa, 19, Egyptian athlete).

"Sport education classes at school had a great effect on my athletic personality" (R, 20, female Egyptian athlete).

On other hand, some of the participants felt that their school's PE classes did not influence them at all to become involved in sports participation. They felt it did not motivate them to even think of engaging in sports while in school and after school. Examples of these participants argued that:

"My P.E. class in school did not influence me at all or help me to participate in sports, because we mostly just sat around during the P.E. classes, doing nothing in particular." (M, 18, Kuwaiti athlete).

"My P.E. class did not motivate me to become an athlete, because most times we had PE I just sat there in class, and did not participate in the games, as I did not know the importance of participation in sports." (D, 17, Kuwaiti athlete).

"My school physical education had no affect on me to be a player; I was not just interested in sports participation." (Sh, 18, Egyptian athlete).

"My opinion on school physical education is that it did not help me to be interested in sports as there was no creation of awareness, we were free to partake or not, so I did not." (Na, 19, Egyptian athlete).

2.3.3.4 Culture

This topic will include the function of culture and gender integration in sports, and the effect of marriage on sport careers in the future.

2.3.3.4.1 Function of culture

Most Egyptian athletes argued that the culture and tradition in their society did not affect their participation in sports. On the other hand, Kuwaiti athletes felt that their culture has affected them negatively in sports participation. Egyptian athletes said:

"Customs and traditions in Egypt do not affect women's participation in sports because we have the liberty to partake in sports." (Nn, 17, Egyptian athlete).

"I think that customs and traditions in Egypt consider it to be normal for the female child to indulge in play and sports like the male child." (So, 19, Egyptian athlete).

"The role of customs and traditions: does not prevent me from sports participation." (Sh, 19, Egyptian athlete).

In contrast with participants from Egypt, most of the Kuwaiti participants felt that culture affects women's participation in sport negatively. Examples of what they said include:

"In fact, our culture in Kuwaiti society controls the way people behave and it affects women more than it does men" (A, 21, Kuwaiti athlete).

"In my country Kuwait our culture does not care much about how women feel or think, rather they expect us to stay in the house and attend to the needs of our husbands and children." (T, 18, Kuwaiti athlete).

"Since the culture guards the society this has affected the way that society views women's participation in sport, therefore, we don't have a free hand to participate in sports" (M, 18, Kuwaiti athlete).

2.3.3.4.2 Gender Integration

Integration between genders in sport is seen as normal in most countries, which is the view of some Arabic countries, one of which is Egypt. In contrast, Kuwait prevents the integration between sexes in sports. This has also affected the Kuwaiti athletes in their general endeavours and vocations. The majority of the Egyptian participants saw that:

"The integration of boys and girls at training and in world championships in sport has become a normal view in Egypt." (M, 19, Egyptian athlete).

"There is no problem in mixing of women with men in Egypt because the society is integrated, and I think that mixing is a better psychological education." (S, 17, Egyptian athlete).

"I think that mixing is the best because interaction generates a fair competition among us the athletes and also makes us united." (No, 18, Egyptian athlete).

Due to the cultural role in Arabic countries, most participants from Kuwait felt that the lack of gender integration is a reason for denying women the opportunity to participate in sports. Kuwait is affected as a result of that role, as the integration between males and females is not acceptable in the Gulf countries. Most Kuwaiti athletes said:

"Kuwait society is not used to integration of sex so it is a strange thing to think of." (A, 18, Kuwaiti athlete).

"Our Kuwaiti society does not allow women to work or play with the opposite gender; so how would they, the Kuwaiti people, give females a free hand to participate in sports, as they are not allowed to be on the same track as their male counterparts." (M, 18, Kuwaiti athlete).

"Integration of gender is not acceptable in Kuwait this is not only in sport; they are affected in other aspects of our life." (Hn, 17, Kuwaiti athlete).

2.3.3.4.3 Marriage

When young girls get involved in sports, they feel skeptical insofar as they feel that their husbands may take full control of their lives, and that in the future, their husbands may stop them from taking an active part in sports. This is not always the case in marriage, where a partner gives the opportunity and the freedom to his wife to continue her sports career. Some of these participants have a view that even though they presently do not know who they are going to be married to in the future, they are skeptical about their freedom once they are married. This, therefore, limits their zeal for participating in sports. This can affect both Kuwaiti and Egyptian females. In contrast, some of the Egyptians and Kuwaiti participants disagreed with this point, and stressed the fact that they have a right to continue participating in sports even after marriage, regardless of what their husband would say or do. These are the views of the Kuwaiti and Egyptian athletes, as regarded in these points:

"My continued participation in sports depends on my husband's acceptance of my participation in sports or not, though on my own I will try to persuade him to allow me to continue participating in sports but if he says no, then I will have to stop." (S,19, Kuwaiti, athlete).

"I would not allow my marriage to disturb my sporting career so I will have to be bold in my decision of marriage and sports, though I know my parents will not be too happy with my decision, but I will try." (Hy,17, Kuwaiti, athlete).

"In the future after marriage I will continue participating in sports, it is my free will not that of my husband, my husband is expected to support me." (Ay, 19, Egyptian athlete).

"In the future after my marriage I will continue in my participation in sport and I will bring up my children in exercise due to the benefits of sports and exercise." (G, 18, Egyptian athlete).

Contrary to the earlier view, marriage is also seen as a barrier to women's participation in sports, as in most Arabic countries, the women enable their husbands to have full control of their lives. An example:

"It depends on my husband: if he accepts my participation in sports, then I will continue, but if he says no, I will stop." (A, 18, Kuwaiti athlete).

"I am sure it will affect my sport participation, but this is the life in our society, so it is not new to me." (S., 18, Kuwaiti athlete).

"After marriage in the future it will affect my participation in sport." (R, 20, Egyptian athlete).

2.3.3.5 Government

The role of the government in establishing policies and organisations in support of sports participation in general, and those involved in sponsoring women in particular, is necessary, as better facilities and equipment that would best suit the needs of females would enhance their sport performance. Most of the athletes from Kuwait and Egypt said that the lack of these necessities has become a type of barrier to their sports participation.

The Governments of Kuwait and Egypt have been strongly supportive of sports, although its emphasis has been (and continues to be) on male sports. The Governments of Kuwait and Egypt have yet to come up with policies that will be of benefit to female athletes. The participants all agreed that the Government is not supportive of female sports.

2.3.3.6 Policies

Most of the participants felt that there are no policies in support of women's participation in sports. The majority of participants argued:

"There is no law that supports women's sports in Egypt." (M, 19, Egyptian athlete).

"There is no policy that supports women's participation in sport in Egypt." (Sa, 17, Egyptian athlete).

"No, there is no form of encouragement from the Government, not to talk of sports policy for women, that sounds like a white dream, I pray to God that it would happen here in Kuwait" (F, 21, Kuwaiti athlete).

"We are aware that there are certain forms of support for females participating in sports but I have not seen any. I continue training even though there is no policy because of my love for sports and not because of the incentive I hope to get" (M, 18, Kuwaiti athlete).

2.3.3.7 Governmental organisations that support associations/clubs

The majority of Kuwaiti and Egyptian participants argued that there are no governmental organizations that support associations/clubs that facilitate women's sports participation. Examples of these arguments include:

"I have not gotten any form of encouragement from government; encouragement comes from our private clubs only." (Nn, 17, Egyptian athlete).

"There is no support of women's sports; federations do not support women's sport they are only concerned with the male." (R, 20, Egyptian athlete).

"There is no encouragement from any organisation." (Hy, 17, Kuwaiti athlete).

"There is no organisation for female sports though there are many involved in the male sports." (F, 18, Kuwaiti athlete).

2.3.3.8 Facilities

Most of the participants stressed the fact that the facilities are not good enough and that they are unsuitable for women's training; this view was shared by Kuwaiti and Egyptian participants. These participants indicated:

"The facilities are not suitable, and a large number of male and female athletes use the track and field at the same time which makes it less conducive for training." (F, 21, Kuwaiti athlete).

"The possibilities of having decent training facilities seems as though we are requesting for something illegal." (Ay, 17, Egyptian athlete).

"Possibilities are not available for us to have decent and adequate facilities in Egypt compared to the chances we would have gotten with these facilities if they were donated to us internationally from foreign bodies." (Sh, 18, Egyptian athlete).

2.3.3.9 Equipment

Athletes are not satisfied with the equipment available to them for training and competitions. Most of these participants feel that the equipment was not of standard and not enough for their training. They had this to say:

"The equipment is not enough because many athletes tend to use them at the same time, male and female alike." (A, 21, Kuwaiti athlete).

"The equipment is not enough and they are specifically designed for males and not for us females" (D, 17, Kuwaiti athlete).

"Training materials are not enough for us; we need more equipment for training to meet international standards." (G, 18, Egyptian athlete).

"Training equipment that we have is to some extent not good enough, compared to other international clubs that practice the same sports as we do." (S, 17, Egyptian athlete).

2.4 Conclusion

This section presents additional information for this study, including suggestions for future research, conclusions, as well as the strengths and limitations of the study.

2.4.1 General Discussion

Research shows that there are regional differences in the factors that affect female sporting participation. For example, Egypt and Kuwait differ in various ways. While Kuwait's society, culture, and the athletes' families generally do not appreciate females' involvement in sports and they do not support gender integration in sport, Egyptian society, culture, and athletes' parents do pay attention to and encourage gender equality. In terms of the similarities between both countries, if an athlete becomes married, some athletes indicated that this will not have an impact on an athlete's career; conversely, some athletes said that this will have an impact in both Kuwait and Egypt. In Kuwait and Egypt, some schools help or motivate athletes to become sportspersons, whilst in other schools, this is the opposite. However, in both countries, generally speaking, there is a lack of regulations and corporations that are pro-women in athletics. Both Kuwait and Egypt also suffer from inefficient and outdated equipment and facilities, as discussed. Table 1 summarizes the differences and similarities between Kuwait and Egypt that affect female's participation in sports. Frequencies of participants provided quotes of each first order themes supported the finding of similarities and differences in both countries as shown in Table 2.

	Contents	Kuwait	Egypt
Similarities	Married	Athletes' Sports Career Affected	Not affected
	Schools	To be an athlete Motivated	not motivated
	Policies	There are no policies that support women's sports	
	Organization	No organization encourages women's sports	
	Facilities	Not suitable Lack of modern facilities	
	Equipments	Not available Not enough – Not sufficient	
Difference	Parental Support	Part of the family not encouraging their daughter	Great role in encouraging athletes
	Society	View of female sports still poor	Awareness of women's participation
	Function of Culture	Affect women's sport negatively	Did not hinder women's participation
	Gender Integration	Impossible Not usual	Normal Rightful education

Table-1 -Kuwait and Egypt: differences and similarities that affect female's participation in sports.

First order themes	Kuwait		Egypt		
	N	%	N	%	
Sources of encouragement	Parents				
	Family	4	40	19	100
	Society	2	20	19	100
	Current performance	10	100	19	100
	High level	10	100	19	100
	Function of culture	1	10	19	100
	Unification	3	30	19	100
	Barriers				
	Family	6	60	0	0
	Society	8	80	0	0
	Function of culture	9	90	0	0
	Unification	7	70	0	0
	Coaches				
Sources of encouragement	Family	1	10	5	100
	Society	0	00	5	100
	Function of culture	0	00	5	100
	Unification	0	00	5	100
	Barriers				
	Society	3	100	0	000
	Polices	3	100	5	100
	Organization	3	100	5	100
	Facilities	3	100	5	100
	Equipments	3	100	5	100
	Function of culture	3	100	0	000
	Unification	3	100	0	000
	Administrators				

Sources of encouragement				
Family	0	000	3	100
Society	0	000	3	100
Function of culture	0	000	3	100
Unification	0	000	3	100
Barriers				
Society	3	100	0	000
Polices	3	100	3	100
Organization	3	100	3	100
Facilities	3	100	3	100
Equipments	3	100	3	100
Function of culture	3	100	0	000
Unification	3	100	0	000
Athletes				
Sources of encouragement				
Family	3	25	22	100
Society	0	0	22	100
School	3	25	10	45
Function of culture	0	0	22	100
Unification	0	0	22	100
Married	4	33	15	68
Barriers				
Family	9	75	0	0
Society	12	100	0	0
School	9	75	12	25
Polices	12	100	22	100
Organization	12	100	22	100
Facilities	12	100	22	100
Equipments	12	100	22	100
Function of culture	12	100	0	0
Unification	12	100	0	0
Married	8	66	7	3

Table 2 Frequencies and percentages of quotes representing the first order themes obtained from Kuwaiti and Egyptian respondents

2.4.2 Similarities and differences between Kuwait and Egypt

Similarities were seen in Kuwait and Egypt in that neither country have policies in place that support females in sport. They also have no governmental organizations that encourage women's sport. In addition, they share the same views about facilities, as neither country has suitable or modern facilities for women's sporting use. This was shown by Ali et al. (2010) who indicated that the lack of culturally appropriate exercise facilities for women was a physical environmental barrier to weight management, and how it is difficult to exercise without these facilities. In the current study, both Kuwaitis and the Egyptians felt that there was not enough or inadequate equipment for them to train with. Furthermore, the equipment that they shared with their male counterparts was hardly available for them to train with. However, differences between the countries emerged in several aspects. Egyptian athletes had received enough parental support. Parents gave their female children encouragement in participating in sports. The society in Kuwait still has limited awareness when it comes to female sports participation, whilst in Egypt, they are aware of the importance of female participation in sports. The same is applicable to their cultures, in that in Kuwait, culture has a negative view regarding women's participation in sports. This situation is not limited to participation in women's sports alone, but also in participation in outdoor exercise to maintain health, as in some other Gulf States. This is consistent with Ali, Baynouna, and Bernsen's (2010) work in the health care and society field in the United Arab Emirates (a Gulf country). The study showed that sociocultural norms limit outdoor exercises, such as families not allowing women to walk outside alone. On the other hand, Egyptian culture has enough awareness on the importance of female participation in sports. In this way, the Egyptians allow for gender integration, while in Kuwait this is not possible. Furthermore, athletes have different views when it comes to the issue of marriage. The Kuwaiti and Egyptian athletes are divided into two groups: some of the participants see marriage as the end of their sporting career unless their husband accepts and allow them to continue with their sporting career. Similarly, athletes' views on the impact of physical education classes on sports participation were mixed. It was noted that some participants indicated that PE classes had a notable impact in that females were encouraged to participate in sports in school, while this was not applicable to others.

Comparing the frequencies and percentage of quotes representing the various themes from Kuwaiti and Egyptian respondents complements the qualitative findings. In terms of differences, Egyptian respondents from all respondent groups consistently mentioned sources of encouragement for women in sport far more frequently, and barriers far less frequently than the Kuwaiti respondents. In terms of similarities, all respondents from both Kuwait and Egypt raised problems with a lack of organizational and policy support and a lack of adequate equipment and facilities.

2.4.3 Conclusions

This study has attempted to clarify the current situation of female's non-participation in sports on the international stage in Kuwait and to compare it to Egyptian females who are allowed to compete. This was in order to help me understand why Egypt (though a Muslim nation, like Kuwait) had afforded women the liberty to participate at international competitions, while women in Kuwait were restricted .

The data showed that all of the factors influencing the exclusion of females from international track and field competitions had adverse effects on women, in that they have limited the level of encouragement provided from the government through the enactment of legislations and laws, and through failing to establish of women's institutions that support and encourage women's sports in the Arab countries in order to promote and develop the current status of women's sports. As result of this, there are no organizations that encourage women's participation in sports; the facilities are not suitable, and there is a lack of modern facilities. Finally, the equipment that women need to use to train in sports is either not available, it is insufficient, or it is inadequate. The fact that female athletes in Egypt had much support from their parents and society in general, mostly due to the acceptance of gender integration, it was brought to light that they also had support from their male counterparts, which has propelled these women to experience positive results at competitions in the Arab nations and across the world. On the other hand, the Kuwaiti female athletes had no support from their communities, no support from any private associations, as well as non-acceptance of gender integration. The Arab countries should pay attention to the importance placed on physical education classes in school in terms of the discovery of sports talent among students at an early age, and in order to develop one's

talent and help the individual in determining his or her future in sports. Since this is the most important place where young talents can be encouraged, with enough support from their school, parents, and government young athletes can represent their country at bigger competitions in the future. With effective government policies that pertain to culture, traditions, and the integration of males and females in relation to Kuwaiti females' participation in track and field competitions, there could be a positive representation of these females on the international stage.

2.4.4 Strengths and limitations

One of the limitations of this study is that there were few clubs or organizations that benefitted female athletes in Egypt, and only one club in Kuwait. Furthermore, the research relied on qualitative data. Qualitative data are often criticized in terms of: reliability (would the results be the same with data produced by another researcher?); validity (was the right conclusion drawn insofar as was the number of athletes, coaches, parents, and administrators enough to give the research validity?); and generalisability (is this study useful in another situation?) (Swetnam, 2004).

The interview as a research tool also has a number of shortcomings. Interviews, for instance, can be threatening or "nerve-wracking" for the participants (Southworth, 1990), and participants may not be ready or willing to go through an interview at a time that is favourable to the interviewer. Moreover, in face-to-face interviews, interviewees may tend to provide information they think the interviewer wants, instead of what they had experienced. Furthermore, because the women's training sessions were short and fixed for only three days, the study was also constrained in terms of time.

2.4.5 Suggestions for Further Study

As this is a very new field of study in Kuwaiti and Egyptian society, this investigation can be used as a source of reference for further studies in Kuwait and Egypt. It can be used as a source of reference for Muslim female studies, and it can also be used for the female Arab nation for further research on their culture and traditions, as it affects females in sports participation within Arab countries and beyond. This would offer insights into how females in Muslim countries need to be supported and encouraged like their counterparts in

Egypt. Furthermore, the findings from this study can act as pacesetters on how the women in these countries should be regarded when they participate in sports, particularly in track and field. There should also be further studies devoted to creating awareness using the media, so that members of Muslim societies will learn more about the advantages of female participation in sports. Work is also needed to be conducted by other researchers and the media on the ways in which to encourage the government to fund female sports in Kuwait and Egypt.

Importantly, motivational issues that arose out of the present study's interviews, especially with respect to the Egyptians athletes who mentioned that PE classes at school motivated them and helped them to be an athlete (e.g., one of the Egyptian athletes indicated "My P.E. class really motivated me to becoming an athlete"). Additionally, throughout my observations during the data collection, I observed that Egyptian athletes had a high level of motivation. These athletes were motivated to challenge their circumstances and regulate their training to improve their performance in order to reach international competitions and achieve good records at international competitions, despite a lack of supportive policies, organizations, facilities, and basic equipment. Kuwaiti female athletes suffer from the same barriers but, in addition, they are severely hindered by negative social and cultural attitudes towards their participation in sports and, indeed, are prevented from possibly engaging in international competitions. This leads to questions about how female athletes in Muslim countries like Kuwait can be motivated to engage in optimal behaviours that would potentially enable them to compete at higher levels. Therefore, the next study will focus on the social context as a determinant of motivation among female Egyptian track and field athletes in order to gain insights into the motivational processes involved in female sports in a Muslim country that does encourage female participation; as a result, these processes might then be applied in Kuwait.

Chapter Three

Need support, need satisfaction, motivation and optimal training behaviours in sport: Examining the applicability of self-determination theory in an Arabic sport context.

CHAPTER THREE

Need support, need satisfaction, motivation, and optimal training behaviours in sport: Examining the applicability of self-determination theory in an Arabic sport context.

3.1 Aims of the Study

The previous study explored the reasons that prevented Kuwaiti female track and field athletes from participating in international competitions, and it compared their experiences with those of Egyptian female track and field athletes. It was noted that although Egyptian athletes faced a number of barriers that were similar to those encountered by Kuwaiti athletes, they were nevertheless motivated to pursue sport at the highest levels. This leads to the question of how female athletes in Muslim countries like Kuwait can be motivated to engage in optimal training behaviours that would potentially enable them to compete at higher levels. In addition, Study One highlighted the importance of encouragement from social agents, especially parents and coaches. Therefore, the aim of the second study was to test the applicability of a contemporary theory of motivation that considers the influence of the social environment on motivation and that has been widely applied to sports contexts, namely self-determination theory (SDT; Deci & Ryan, 1985). The aim was to gain insights into the motivational processes involved in female sports in a Muslim country that does encourage female participation, and which might then be applied in Kuwait. SDT proposes a motivational sequence whereby support from the social environment can enhance the satisfaction associated with meeting one's psychological needs which, in turn, facilitates more autonomous motivation and optimal behaviours. The sequence was tested by examining the influence of Egyptian female athletes' perceptions of the support offered by coaches, parents, and fellow athletes on the women's perceptions of competence, autonomy, and relatedness, thereby facilitating autonomous motivation for sport engagement and positively influencing athletes' training behaviours.

3.2 Forms of Motivation

As defined by Deci and Ryan (1985, 2000) and Ryan and Deci (2002, 2007), SDT was developed to understand and explain the motivation that drives the actions of an individual, as well as its causes and implications. A number of researchers (e.g., Brière, Vallerand, Blais, & Pelletier, 1995; Brunel 1999; Ntoumanis, 2001; Pelletier, Fortier, Vallerand, & Brière,

2001; Pelletier *et al.*, 1995; Petherick & Weigand, 2002) have employed this theory to analyse the social and psychological factors that motivate athletes. The findings have revealed that the more self-determined in their motivation athletes are, the more likely it is that they will succeed, and this self-determination is stimulated by certain environmental factors that support the women's basic psychological needs for autonomy, competence, and relatedness.

Self-determination theory has been formulated on the inference that people have an inherent inclination towards translating the behaviour and activities they engage in into a sense of self that they can identify with (Deci & Ryan, 1985 b, 2002; Ryan & Deci, 2000). However, this process of integration relies on a number of social factors, which can have a positive or negative effect. Motivational processes revolve around three main concepts – namely, intrinsic motivation, extrinsic motivation, and amotivation.

Intrinsic motivation is represented by freely engaging in activities that give pleasure to the participants. However, extrinsic motivation also plays a role in the choice that athletes make when performing a certain sport, and it can be defined as a behaviour that is dictated by the anticipated results, such as rewards, but which is not inherently related to the activity being carried out. Self-determination theory specifies that extrinsic motivation can be classified into four forms of behavioural regulation based on the extent of autonomy they afford: external regulation, introjected regulation, identified regulation, and integrated regulation.

External regulation is a non-self-determined form of behavioural regulation that involves engaging in an activity in order to gain rewards or avoid punishments administered by others. For example, when externally motivated, the main reason why an athlete takes part in training sessions is to obtain the acknowledgement of his or her instructor for his or her performance; thus, it can be said that these athletes are stimulated by external regulation. Introjected regulation refers to the external contingencies that athletes have partially incorporated into the regulation of their behaviour. For example, athletes might participate in certain activities so as to not feel guilty, ashamed, or anxious. External and introjected regulation are said to be controlled forms of motivation because they represent the controls imposed upon the individual either by others or by themselves. In contrast, SDT specifies that there are certain forms of extrinsic behavioural regulations that represent more autonomous forms of motivation. Identified regulation reflects a more self-

determined form of motivation, as individuals choose to perform a certain activity despite the fact that it may not appeal to them, and because the outcomes of this activity are personally important to them, rather than having the behaviour imposed upon them. An example of an identified regulation is when athletes take part in training sessions for muscle development due to the fact that, although not very engaging in itself, it benefits their performance. Integrated regulation is the most self-determined form of extrinsic motivation, as individuals are wholly in charge of selecting the activities that have become an intrinsic part of their selves and value systems. In this context, athletes can refuse to participate in certain activities if they come into contradiction with this value system (Ryan & Deci, 2000). There are numerous contexts that expose people to the extrinsic factors that make them take part in a sport, including social learning and socialisation (Lindner & Kerr, 2001).

3.3 Basic psychological needs

According to self-determination theory, the process of the integration of behavioural regulation is stimulated when three fundamental psychological needs are met. Specifically, individuals need to experience satisfaction in their needs for autonomy, competence, and relatedness when interacting with the surrounding interpersonal environment (Deci & Ryan, 2000). The need for autonomy is satisfied when the individual feels volition and psychological freedom to engage in a specific behaviour. Competence is satisfied when the individual feel effective in their interactions with the social environment. Relatedness is satisfied when the individual feels secure, loved, or cared for by others (Deci & Ryan, 2000; Vansteenkiste, Ryan, & Deci, 2008). Furthermore, self-determination theory argues that the social environment is essential for the development and proper social functioning of individuals. The psychological and physical welfare of people depends on the fulfilment of the three fundamental psychological needs (Deci & Ryan, 2000). Among the three psychological needs, autonomy is indicated by self-determination theory as being crucial for optimal motivation. White (1959) argued that, despite its importance, competence alone is insufficient to generate optimal motivation. People can be forced to prove their competences, but they will not feel self-motivated in doing so (Deci & Ryan, 2000).

With regard to sports, the closest interpersonal relationship is usually that between the athlete and the needs of the athlete (Mageau & Vallerand, 2003; Smith, Smoll, &

Cumming, 2007). Gagné, Ryan, and Bargmann (2003) and Reinboth, Duda, and Ntoumanis (2004) have discussed the connections between the environment that is constructed by the coach, and the psychological needs and well-being of athletes. Further studies have sought to analyse these connections more closely. Research with a particular focus on sports has corroborated the fundamental assumptions formulated by self-determination theory regarding the association between the encouragement of autonomy and the fulfilment of psychological needs (Vallerand, 2001). Blanchard and Vallerand (1996) conducted a study on basketball players and observed that feelings of autonomy among the players increased if the behaviour of the coach was perceived as encouraging autonomy. Similar findings were obtained by Standage, Duda, and Ntoumanis (2003), who examined the perceptions of students with regard to the degree to which the environment in which the physical education activities took place nurtured autonomy.

3.4 Need supportive behaviours

The influence of social environmental factors on the fulfilment of psychological needs is the focus of a number of studies. Self-determination theory has indicated three main factors of interpersonal styles that are essential for the satisfaction of the three psychological needs: autonomy support, structure, and involvement. Autonomy support involves not resorting to coercion or compulsion, and the provision of choices and options. Additionally, the encouragement of autonomy has to be tailored to the values and ambitions of each individual (Deci & Ryan, 2002). Self-determination theory also emphasises the role played by the elements of involvement and structure in nurturing autonomous motivation. Structure refers to the provision of clear and pragmatic information in a consistent fashion and positive informational feedback. Involvement entails showing a genuine interest in and caring about the well-being of an individual. When social agents support individuals' psychological needs through the provision of autonomy support, structure, and involvement, their behaviour is more likely to be self-determined or autonomous, and they are more likely to engage in adaptive behaviours. Conversely, if the social environment frustrates the satisfaction of needs, the regulation of an individual's behaviour is more likely to be controlled. Individuals will feel pressured and they are less likely to engage in sustained adaptive behaviours (Markland, Ryan, Tobin, & Rollnick, 2005).

According to Horn (2002), athletes are most extensively influenced by their coaches. Among the different methods of instruction, encouragement of autonomy has been indicated to be essential (Mageau & Vallerand, 2003). As explained by Grolnick and Ryan (1989), the encouragement of autonomy manifests when the instructor limits the use of coercion and acknowledges the point of view of the athlete and enables him/her to make his/her own choices and take part in the decision-making process. Studies have revealed that the motivation, perseverance, and welfare of athletes are considerably enhanced through the encouragement of autonomy, as provided by the instructor (Amorose & Anderson-Butcher, 2007; Reinboth *et al.*, 2004).

Amorose (2007) also showed that the behaviour of coaches has a significant influence on the cognitive and emotional reactions of their athletes. If the attitude of the coach is positive and encouraging, then the self-esteem of the athletes increases substantially, and they also enjoy the activities they engage in more. In contrast, an unfriendly attitude of the instructor has a negative impact on the competence, effort, and perseverance of athletes (Coté, 2002; Smoll & Smith, 2002). It has been argued that encouragement of autonomy, as expressed by the instructor, is the factor most strongly associated with athlete motivation (Amorose, 2007; Mageau & Vallerand, 2003; Vallerand & Losier, 1999). However, it has been shown that supports for competence and relatedness are also critical. For example, studies in physical education have indicated that the facilitation of competence leads to increased vitality and positive affect (Mouratidis, Vansteenkiste, Lens, & Sideridis, 2008), and intrinsic motivation and motor performance (Moreno, Gongalez-Cutre Coll, Morti-Albo, & Cervello, 2010). Pelletier, Fortier, Vallerand, Tuson, Brie`re, and Blais (1995) found that athletes who perceived that their coaches cared for them and were involved were more self-determined in their sport motivation, and Ommundsen and Vaglum (1991) showed that emotionally positive professional and parental involvement corresponded with greater enjoyment among youth soccer players.

3.5 Cultural considerations and SDT

Self-determination theory can provide a comprehensive picture of the manner in which social factors influence the need satisfaction and welfare of athletes, which represents the main focus of the present study. According to self-determination theory, the abovementioned psychological needs are universal; in all cultures, the well-being and

optimal motivation of individuals depends on the fulfilment of these needs. However, the value systems of different cultures determines the discrepancies in the level of fulfilment of these psychological needs, based on how effective the process of individual assimilation of the external (e.g., cultural) values is (Deci & Ryan, 2000). Due to these differences, the mechanisms of fulfilment of the psychological requirements may vary across cultures (Deci & Ryan, 2000).

On the other hand, cultural relativism argues that different needs are acquired within different cultures (Markus & Kitayama, 1991; Markus, Kitayama, & Heiman, 1996). According to cultural relativism, autonomy is a concept developed in the Occident as a result of its fixation with individualism and, as such, it would have less value in more collectivist cultures, such as Islam-based cultures found in the Middle East. According to this view, SDT would not be applicable in such cultures. Self-determination theory specifies that all individuals have the same basic needs, despite the important effect that cultural systems have on individuals (Deci & Ryan, 1985; 2000). The mechanisms of fulfilment of these needs may vary across cultures, but the actual fact that these needs have to be fulfilled to enhance individual welfare is independent of cultural values (Deci & Ryan, 2008). Therefore, it could be argued that individual motivation and welfare are fundamental psychological requirements expressed by people in different cultures, and they transcend the surface discrepancies found in cultural norms (Chirkov & Ryan, 2011).

There is one published study on SDT in a Muslim context (Nicaise & Kahan, 2013). The study aimed to examine the effect of a faith-based pedometer programme (Virtual Umra) on the psychological correlates of physical activity (PA) behavior, and their contribution to school time changes in PA among Muslim adolescents living in North America. The results of this study showed that boys increased their PA, whereas girls reduced their PA. In addition, enjoyment increased and extrinsic motivation and amotivation decreased. Enjoyment and more self-determined behavioural regulations were positively associated with non-physical education PA; intrinsic motivation was positively associated with PE-day PA. However, although the Nicaise and Kahan study included SDT-related variables, they did not assess the motivational sequence proposed by SDT and, therefore, the study did not represent a comprehensive test of the theory. Furthermore, the study examined Muslims living in Southern California, whereas the present study will test the principles of SDT among Muslims actually living in an Arabic country. Finally, the Nicaise

and Kahan study employed a sample containing several different nationalities, of which only 33% were Arabic.

According to SDT, then, regardless of the cultural context, when an individual's social environment supports the satisfaction of his or her basic psychological needs, more self-determined motivation will be promoted, and the individuals are more likely to engage in and sustain adaptive behaviours. An example of a study that has tested this motivational sequence is Vallerand, Fortier, and Guay's (1997) study of high school dropouts. They examined a model in which autonomy support provided by parents, teachers, and school administrative staff facilitated the satisfaction of the needs for autonomy and competence in school. This, in turn, enhanced the children's autonomous motivation for school, which was associated with fewer early dropouts from school. The current study tested a similar model in the context of engagement in sports among Egyptian female athletes. This study examined the influence of support on the psychological needs provided by athletes' coaches, parents, and fellow athletes on the athletes' psychological need satisfaction and self-determined motivation for engaging in sport. In turn, the influence of these motivational processes on a relevant behaviours was examined.

3.6 Training behaviours

One important area of behaviour in sport that is clearly likely to be influenced by motivation is the quality of the behaviours engaged in during training. Therefore, in the present study, it was decided that the motivational determinants of the athletes' training behaviours be examined. Galton (1979) proposed that the improvement of performance is monotonic and based on practice. Ericsson, Krampe, and Tesch-Roemer (1993) also identified the quality of training to be of great significance, arguing that improved performance is the outcome of various factors, including well-structured activities with an adequate level of difficulty and constructive feedback, as well as opportunities to repeat or correct tasks. A positive correlation was discerned by Green-Demers, Pelletier, Stewart, and Gushue (1998) between increased interest in training with different adaptive forms of motivation and the introduction of challenges and task diversity, the provision of self-relevant motives for task completion, and the use of stimulation from sources extraneous to the actual task.

However, specific optimal training behaviours have received little attention in the literature, despite the fact that athletes spend much more of their time training than

competing. In one of the few studies specifically examining training behaviours in sport thus far, Harwood (2008) found that the development of young footballers relied on five behaviours – namely, “showing elevated levels of effort” (perseverance), “asking questions of coach about a drill or skill” (dialogue), “listening to instructions attentively and maintaining eye contact” (attention), “maintaining high positive body language to all events and consistency throughout” (control), and “bringing a presence to training that exudes confidence” (aplomb). Holt and Dunn (2004) proposed additional factors that enhance performance, such as managing skills, the ability to work under pressure, perseverance, and conformity.

In order to gain a more comprehensive understanding of optimal training behaviours, Oliver, Hardy, and Markland (2010) conducted focus groups with elite youth coaches in order to determine which training behaviours coaches deemed important with regard to athlete development. Using qualitative data analyses, a number of themes emerged representing both the specific behaviours and attitudes that the coaches felt were vital for a successful career in sport. Four overall themes were identified, comprising professional behaviours, motivation, coping, and self-improvement. Six behaviours were identified by the coaches as reflecting professionalism, which was perceived as a training approach that was associated with the behavioural and moral standards that high-performing athletes must abide by. The six behaviours were correct appearance, preparation, punctuality, honesty, respect for coaches, and respect for fellow athletes.

There were five subcategories for the overall theme of motivation – namely, the ambition to achieve the highest performance, the ambition to succeed, a competitive nature, self-motivation, and a focus on goal achievement. This category incorporated the training attributes related to an athlete’s will to achieve a goal. The coping theme encompassed four lower-order categories associated with the manner in which athletes handle the demands of their particular sport. The categories were: hard work after failure, maintaining a positive outlook after setbacks (pertaining to the wider theme of resilience), adequate responses to success, and mental stamina. There were five subcategories of acquiring information for improvement: posing questions, responding to questions, self-assessment, requesting feedback, and mobilising negative feedback to improve. What made these behaviours similar was the fact that all of them entailed the acquisition of information as a method of improving performance. Based upon the themes emerging from these

analyses, Oliver (2009) developed a training behaviours questionnaire: the Trait Training Attitudes and Behaviours Questionnaire.

3.7 The Present Study

The aim of the present study is to assess the motivational sequence posited by SDT in the context of sports coaching. According to SDT, the need for the satisfaction of basic psychological needs is essential for optimal motivation, well-being, and behavioural persistence, and it is universal and applies to all cultures. On the other hand, cultural relativists have argued that the need for autonomy is a 'Western' need and does not apply to collectivist cultures. Therefore, another aim of the present study was to determine whether the principles of SDT would hold in an Arabic cultural context. A model was tested in which need support provided by three different contextually important sources (parents, coaches, and fellow athletes) enhances satisfaction of the three psychological needs, in turn promoting more self-determined motivation for sport engagement and more positive training behaviours among Egyptian female track and field athletes. Figure 1 shows an overview of the model.

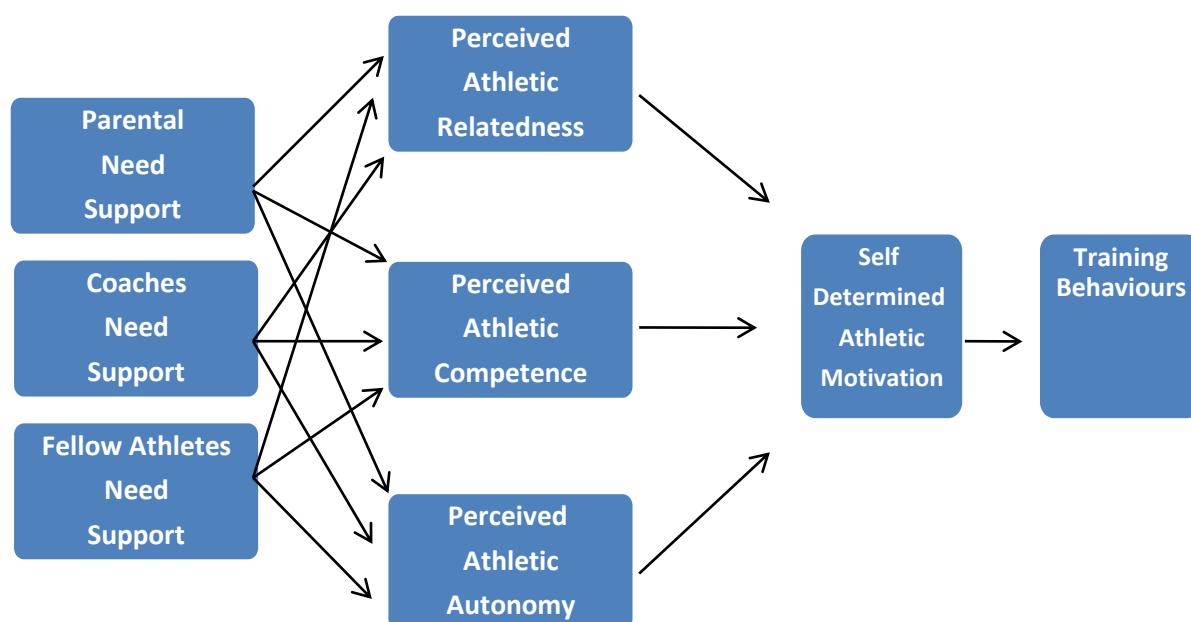


Figure 1. Motivational sequence model tested in the current study.

More specifically, it is hypothesised that the need support provided by parents, coaches, and fellow athletes would enhance athletes' perceptions of autonomy, competence, and relatedness. Perceptions of autonomy, competence, and relatedness would be positively associated with more self-determined forms of motivation (intrinsic, integrated, and identified) and negatively associated with more controlling forms of motivation (extrinsic and introjected), as well as with amotivation. In turn, more self-determined motivation would be positively associated with more positive training behaviours and negatively associated with negative training behaviours, whereas more controlled forms of motivation and amotivation would be negatively associated with positive behaviours and positively associated with negative behaviours. In addition, it was hypothesised that need satisfaction would mediate the associations between need supports and behavioural regulations, and behavioural regulations would mediate the associations between needs satisfaction and training behaviours. If the SDT sequence is supported in this context, then it would suggest that motivational interventions based on SDT could be successfully applied in Arabic-Muslim cultural contexts.

3.8 Methods

3.8.1 Participants

Participants were 310 Egyptian female athletes in track and field who participated in different events (sprint, middle- and long-distance, high- and long-jumps, shot-put, discus throw, hammer throw, and javelin throw). Participants' ages ranged from 14 to 31 years (mean=19.19; SD=3.54). 53.9% of participants had a high school education alone, and 46.1% had a university education. 51% competed at the local club level, 22% at the university level, 2.3% at the county level, 19.4% at the national level, and 4.8% at the international level. The athletes had a mean level of experience of 5.77 years (SD=3.35).

3.8.2 Measures

Participants completed a questionnaire comprising four parts: needs support, perceived need satisfaction, behavioural regulation, and training behaviours. The questionnaire was scored on a seven-point Likert-type scale with responses ranging from 1 (not true for me) to 7 (very true for me). Participants were asked to respond to the items with regard to their feelings and experiences in their major sport. The questionnaires were initially written and

prepared in English and then translated into Arabic, the participants' first language. The translation was checked by a speaker of Arabic and English to ensure accuracy.

3.8.2.1 Need support

The Need Support Scales were adapted from existing scales used to assess need support across other behavioural domains. The questionnaire included three subscales that assessed the participants' perceptions of need support from their parents, coaches, and fellow athletes .

3.8.2.2 Parental need support

Perceptions of parental need support were assessed with an adaptation of Niemiec *et al.*'s (2006) Perceptions of Parents Scale, which assessed adolescents' perceptions of their parents' provision of autonomy (e.g., "My parents allow me to decide things for myself"), structure (e.g., "My parents make me feel competent in my work"), and involvement (e.g., "My parents care about me"). The reliability for the original version of this measure with the three dimensions combined was .88 (Niemiec *et al.*, 2006). The scale in the present study consisted of 15 adapted items representing athletes' perceptions of their parents' needs support for autonomy (e.g., "My parents whenever possible, allow me to choose what to do"), structure (e.g. "My parents convey confidence in my abilities"), and involvement (e.g. "I feel understood by my parents"). (See Appendix D).

3.8.2.3 Coaches' need support

Perceptions of coaches' need support were assessed with an adaptation of Markland and Tobin's (2010) Perceptions of Need Support Scale, which assessed female exercise referral scheme clients' perceptions of their exercise practitioners' provision of autonomy (e.g., "Take into account my individual needs"), structure (e.g., "Give me good advice"), and involvement (e.g., "Make time for me even though they are busy"). A principal components analysis of the items in the original version of this measure produced a single factor with loadings ranging from .64 to .93, and the reliability with the three dimensions combined was .97 (Markland & Tobin, 2010). The scale used in the present study consisted of 15 adapted items representing athletes' perceptions of their coaches' need support for autonomy (e.g., "My coaches make me feel free to make a decision"), involvement (e.g., "My coaches make

me feel like I matter to them”), and structure (e.g., “My coaches help me to feel confident about training”). (See Appendix E).

3.8.2.4 Fellow athletes’ need support

Perceptions of fellow athletes’ need support were also assessed with an adaptation of Markland and Tobin’s (2010) Perceptions of Need Support Scale. The scale that was used in the present study consisted of 15 adapted items representing athletes’ perceptions of their fellow athletes’ need support for autonomy (e.g. “My fellow athletes are concerned about my individual needs”), involvement (e.g. “My fellow athletes care about me”), and structure (e.g. “My fellow athletes help me understand what I need to do in training”).

In the data analyses procedures, for each of the need support measures, the three dimensions (autonomy support, structure and, involvement) were collapsed into single scores for overall need support. (See Appendix F).

3.8.2.5 Need satisfaction

The Basic Needs Satisfaction in Sport Scale developed by Ng, Lonsdale, and Hodge (2010) was used in the current study. The scale comprises six subscales to assess participants’ perceptions of autonomy, competence, and relatedness. Autonomy is assessed by three subscales consisting of Choice (e.g., “In my sport, I have a say in how things are done”), Internal Perceived Locus of Causality (IPLOC) (e.g., “In my sport, I feel I am pursuing goals that are my own”), and Volition (e.g. “I feel I participate in my sport willingly”). The Competence subscale assesses participants’ perception of competence in sport (e.g., “I can overcome challenges in my sport”). The Relatedness subscale assesses perceptions of being cared for and accepted by others in sport (e.g. “In my sport, I feel close to other people”). The fit for this model for the original version of the measure was examined using a confirmatory factor analysis: scaled χ^2 (160, N=371) = 341.70, $p < .01$, CFI=.97, RMSEA=.06 (Ng, Lonsdale, & Hodge, 2010). Consistent with Ng et al.’s conceptualization of the measurement of autonomy, in the present study autonomy was modelled as a higher-order latent variable with volition, IPLOC and choice as lower-order latent indicators. (See Appendix G).

3.8.2.6 Behavioural Regulation in Sport

The Behavioural Regulation in Sport Questionnaire (BRSQ) developed by Lonsdale, Hodge, and Rose (2008) was used to measure the types of motivational regulation, as specified in SDT. The BRSQ includes subscales designed to measure amotivation; external, introjected, identified, and integrated regulation; and intrinsic motivation. The amotivation subscale was not used in the present study, as it was assumed that the athletes would be motivated, in one form or another, to engage in sport. Separate subscales are available to assess intrinsic motivation in general, as well as one's intrinsic motivation to know, experience stimulation, and accomplish. In the present study, only the general intrinsic motivation subscale was used. Some subscales were collapsed to create controlled and autonomous extrinsic regulation. Controlled regulation included external regulation (e.g., "Because people push me to play"), and introjected regulation (e.g., "Because I would feel guilty if I quit"). Autonomous extrinsic regulations included identified regulation (e.g., "Because the benefits of sport are important to me") and integrated regulation (e.g., "Because what I do in sport is an expression of who I am"). Finally, intrinsic motivation was assessed using general intrinsic motivation items (e.g., "Because I find it pleasurable"). The BRSQ-5 comprises 20 items. The questionnaire starts with "I participate in sport." The fit for this model for the original version of the measure was examined using confirmatory factor analysis: scaled X^2 (237, $N=386$) = CFI=.97), RMSEA=.07 (Lonsdale, Hodge, & Rose, 2008). (See Appendix H).

3.8.2.7 Training behaviours

The last part of the questionnaire comprised 29 items from the Trait Training Attitudes and Behaviours Questionnaire (TTABQ) (Oliver, 2009). The trait questionnaire included subscales assessing professional behaviour (e.g., "I always turn up with the correct kit for training"), respect (e.g., "I have a high regard for my coach"), commitment (originally labelled as motivation, but it was relabelled in the present study to avoid confusion with SDT terms) (e.g., "I am highly motivated to succeed"), coping (e.g., "If I perform poorly I work hard to put things right"), and self improvement (e.g., "I check if I am doing as well as I should be"). Examination of the fit statistics indicated that the model represented an acceptable fit to the data (Scaled X^2 (413)=709.51, $p<.001$; RMSEA=.05; CFI=.95; NNFI=.95; SRMR=.084) (Oliver, 2009). Cronbach's alphas ranged from .68 to .87. (See Appendix I).

3.9 Pilot study

The questionnaires were initially written and organized in English, and they were then translated into Arabic, the participants' first language. To ensure the accuracy of the translation, this was completed by a speaker of Arabic and English. The questionnaire was pilot tested with five Arabic athletes prior to being used with the main sample. Participants received an e-mail request to complete the questionnaire online. This was done in order to determine the comprehensibility of the questions so that the wording could be revised if necessary. No rewording was required.

3.10 Procedure

Following ethics approval of the project from Bangor University, and upon receiving agreement from the sport administrators who are national representatives of the Egyptian track and field organization, coaches were contacted six weeks beforehand in order to inform them of the study. The data were collected in five Athletics Clubs in Egypt. The purpose and nature of the study was explained, and then an information sheet about the study was given to the athletes. All participating athletes signed the consent forms prior to commencing the study. Participation by the athletes was voluntary and required the completion of questionnaires during a normal training session. Participants also had to fill in a form detailing their athletic history (e.g., team/club name, number of years as an athlete, competition level, events attended, and achievements). Athletes completed the questionnaire individually during their training session, taking not longer than 25 minutes. Questionnaires were completed in the absence of coaches, parents, and fellow athletes to ensure that the data were not influenced by their presence.

3.10.1 Statistical analysis

The model was subjected to partial least squares (PLS) analysis, using the Smart PLS software, M3 Release (Ringle, Wends, & Will, 2006). PLS represents a different method of causal modelling to the standard covariance-based approach, and it uses a prediction-oriented approach. The application of PLS in the present study is warranted for three reasons. First of all, given the partial character of the estimation process, where a single part of the model is estimated at each time, the use of PLS is more suitable in the case of small sample sizes (Chin, 1998), which is in contrast to the covariance-based approach to latent

variable modelling. Chin and Newsted (1999) proposed that the estimation of sample size for the PLS analysis should be carried out via a power analysis on the most extensive portion of the model – in other words, the portion that contains the dependent latent variable with the highest number of predictors. In the case of the currently tested model, the highest number of predictors was three. For a medium effect size (Cohen's $f^2=.15$), the identification of significant effects at the .05 level with a power of .80 would need a sample size of 76 (Cohen, 1988). Secondly, as pointed out by Fornell and Bookstein (1982), PLS provides an explicit estimate of latent variables as precise linear aggregates of their associated observed indicators, therefore making it appropriate for prediction purposes. Thirdly, PLS employs non-parametric procedures and does not make restrictive assumptions regarding data distribution during parameter estimation (Frank and Miller, 1992).

The analysis entails the indirect measurement of a number of latent variables based on a series of manifest variables. The prediction equation generates factor loadings for every series of manifest variables, and standardised regression coefficients for the associations between the latent variables. According to Chin (1998), PLS consists of two models: a measurement, or outer, model; and a structural, or inner, model. The former identifies the connections between the latent variables (LVs) and the correlated manifest variables (MVs). The second model connects latent variables to each other. PLS ensures that the component score obtained for every latent variable has been generated in accordance with the estimated indicator weights by employing an iterative estimation technique that maintains residual variance to a minimum, based on issuing consecutive approximations for the estimates of loadings and path parameters. As a result, the variance for both latent and manifest variables is enhanced.

In accordance with Hulland (1999), the PLS model analysis was carried out in two stages: the measurement model was verified first, and then the structural paths were assessed. Unlike covariance-based SEM, PLS does not permit a global evaluation of model fit, as it does not produce fit indices. Instead, an assessment is made based on the analysis of the reliability, convergent and discriminant validity of the measurement model, as well as of the ability of the structural model to generate predictions. In this study, the measurement model was verified by evaluating the item reliabilities based on the factor loadings of the items on their corresponding latent variables. The internal consistency of each scale was then evaluated according to their composite reliability (CR) coefficient, which

is believed to be more efficient than Cronbach's alpha due to the fact that it does not infer equal loadings for each item (Fornell & Larcker, 1981). A CR that exceeds .70 is considered to indicate an acceptable level of internal consistency (Fornell & Larcker, 1981). The average variance extracted (AVE), meaning the mean variance explained in a block of indicators by their related latent variable, was analysed to evaluate convergent validity. When the AVE is .50 or more or, in other words, when the latent variable explains at least 50% of the variance in its indicators, it can be implied that convergent validity exists (Fornell & Larcker, 1981). Discriminant validity between latent variables exists when the variance shared between a construct and its indicators is more extensive than the variance shared between a latent variable and the other latent variables or, in other words, when the AVE of a latent variable exceeds the squared bivariate correlations with the other latent variables (Fornell & Larcker, 1981). The significance of the structural parameter estimates are evaluated based on a bootstrapping procedure, due to the fact that Smart PLS does not generate inferences related to data distribution. In this study, 5,000 bootstrap samples replacements were requested. The technique proposed by Paternoster, Brame, Mazerolle, and Piquero (1998) was employed to identify differences in the size of the path coefficients regarding the assessment of need support provided by coaches, fellow athletes and parents. This technique involves the calculation of a *t*-score for the differences in coefficients using the following formula: $t = (b1 - b2) / \text{SQRT} [(SEb1^2 * SEb2^2)]$. Finally, the amount of explained variance in the latent variables (R^2) was analysed. The effect sizes of the R^2 values were calculated to evaluate the size of the effects using Cohen's f^2 : small (<.15), moderate (<.35), or large (>.35), due to the fact that Smart PLS does not allow for the production of significance tests for the R^2 values.

In cases where intervening variables between the distal variables were observed, tests of indirect effects were carried out. The Monte Carlo method was employed to assess the significance of specific indirect effects where there was more than one mediator, using Selig and Preacher's (2008) interactive tool for creating confidence intervals for indirect effects. An effect can be inferred to be significant when its confidence interval does not encompass zero.

3.11 Results

3.11.1 Measurement model

The initial measurement model analysis showed that several observed indicators had very low factor loadings. The majority of AVEs were greater than .5, except for needs support (coach) AVE=.45, needs support (parents) AVE=.47, and autonomous extrinsic regulation AVE=.45. In addition, five observed indicators had high cross loadings. Thus, a number of items were eliminated, and the model was re-estimated. Table 1 shows the eliminated items and the reasons for their elimination.

Table 2 shows the factor loadings and their standard errors following item elimination. PLS and bootstrapped estimates for all factor loadings were greater than .40 and significantly greater than zero in all cases. The three need support factors had loadings between .52 and .84 ($p<.001$); perceived competence had loadings between .64 and .84 ($p<.001$); perceived relatedness had loadings between .53 and .84 ($p<.001$); perceived autonomy had loadings between .49 and .79 ($p<.001$); controlled self-regulation had loadings between .52 and .83 ($p<.001$); autonomous extrinsic self-regulation had loadings between .58 and .75 ($p<.001$); intrinsic motivation had loadings between .69 and .85 ($p<.001$); professional behaviour had loadings between .54 and .82 ($p<.001$); respect had loadings between .75 and .78 ($p<.001$); motivation had loadings between .62 and .82 ($p<.001$); coping had loadings between .66 and .78 ($p<.001$); and self-improvement had loadings between .72 and .84 ($p<.001$).

Factor	Item	Reason for removing
Need Support (Parents)	My parents insist upon my doing things their way. My parents try to tell me how to live my life. My parents allow me to decide things for myself. My parents aren't very sensitive to my needs and feelings. My parents are not very involved with my concerns. My parents constantly blame me for my mistakes. My parents never listen to how I would like to improve things.	Low loading Low loading Improve AVE Low loading Low loading Improve AVE Improve AVE
Need Support (Fellow athletes)	My fellow athletes support my decisions.	Low loading
Autonomy	In my sport, I feel that I am being forced to do things that I don't want to do.	Low loading
Controlled Regulation	I participate in sport because I would feel ashamed if I quit. I participate in sport because I feel obligated to continue.	Low loading Low loading
Autonomous Extrinsic Regulation	I participate in sport because what I do in sport is an expression of who I am.	Low loading
Competence	I am skilled at my sport. I feel I am good at my sport.	Improve AVE High cross loading
Relatedness	In my sport, there are people who I can trust.	High cross loading
Commitment	I am driven to succeed.	High cross loading
Coping	I can cope well with setbacks.	Improve AVE
Self-Improvement	I complete any additional workouts, I am set. When I am given negative feedback, I use it to improve.	High cross loading High cross loading

Table_1_

Measurement model (reasons for item elimination prior to model re-estimation).

Table 4 shows the composite reliabilities (CR), average variances extracted (AVEs), average variance extracted square roots (AVE sqrt), and correlations among the factors in the measurement model. CRs were all greater than .70 and AVEs were greater than .50, except for three factors (need support from coaches, need support from parents, and autonomous extrinsic self-regulation). However, the CRs for these factors were very high

(.93, .88, and .85, respectively). Thus, overall, the model showed acceptable convergent validity at the item level. AVEs for each latent variable were greater than the squared bivariate correlations with all the other latent variables, indicating acceptable discriminant validity of the scales.

Factor and Item	Factor Loading	SE
Needs Support (Coach)		
Take into account my individual needs.	.597	.035
Give me good advice.	.707	.032
Make time for me even though they are busy.	.736	.030
Make me feel free to make decisions.	.523	.051
Make clear to me what I need to do to get results.	.656	.039
Make me feel like I matter to them.	.651	.043
Provide a range of training activities .	.566	.043
Make clear what to expect from engaging in the sessions.	.621	.039
Are concerned about my wellbeing.	.670	.038
Provide me with choices and options.	.570	.047
Give me training activities that are suited to my level.	.732	.030
Look after me well.	.755	.023
Encourage me to take my own initiative.	.730	.031
Help me to feel confident about training.	.777	.024
Care about me.	.752	.028
Needs Support (Fellow athletes)		
Are concerned about my individual needs.	.667	.035
Often give me good advice.	.702	.040
Make time to help me even though when are busy.	.696	.035
Help me to make decisions that are good for me.	.718	.034
Help me to get results.	.767	.032
Make me feel like I matter to them.	.671	.041
Help me understand what I need to do in training.	.680	.037
Are concerned about my wellbeing.	.763	.026
Help me make choices.	.676	.044
Help me to train at the right level.	.743	.030
Look after me well.	.823	.029
Encourage me to take my own initiative.	.775	.020
Help me to feel confident about training.	.847	.027
Care about me	.774	.028
Needs Support (Parents)		
My parents whenever possible, allow me to choose what to do.	.630	.054
My parents convey confidence in my abilities.	.801	.031
I feel understood by my parents.	.662	.051
My parents make me feel competent in my work.	.635	.066
My parents put time and energy into helping me.	.661	.042
I can be myself with my parents.	.674	.046
My parents answer my questions fully and carefully.	.692	.033
My parents care about me.	.732	.040
Competence		
I can overcome challenges in my sport.	.645	.059
I get opportunities to feel that I am good at my sport.	.842	.023
I have the ability to perform well in my sport.	.815	.024

Choice		
In my sport, I get opportunities to make choices.	.795	.030
In my sport, I have a say in how things are done.	.848	.026
In my sport, I can take part in the decision-making process.	.635	.061
In my sport, I get opportunities to make decisions.	.842	.027
Internal perceived locus of causality (IPLOC)		
In my sport, I feel I am pursuing goals that are my own.	.851	.030
In my sport, I really have a sense of wanting to be there.	.853	.026
In my sport, I feel I am doing what I want to be doing.	.820	.026
Volition		
I feel I participate in my sport willingly.	.884	.034
I choose to participate in my sport according to my own free will.	.694	.061
Autonomy		
Choice		
In my sport, I get opportunities to make choices.	.783	.028
In my sport, I have a say in how things are done.	.795	.028
In my sport, I can take part in the decision-making process.	.577	.061
In my sport, I get opportunities to make decisions	.797	.033
Internal perceived locus of causality (IPLOC)		
In my sport, I feel I am pursuing goals that are my own.	.758	.045
In my sport, I really have a sense of wanting to be there.	.788	.035
In my sport, I feel I am doing what I want to be doing.	.793	.035
Volition		
I feel I participate in my sport willingly.	.674	.051
I choose to participate in my sport according to my own free will	.495	.063
Relatedness		
In my sport, I feel close to other people.	.765	.034
I show concern for others in my sport.	.533	.072
There are people in my sport who care about me.	.845	.023
I have close relationships with people in my sport.	.822	.030
Controlled regulation		
Because people push me to play.	.755	.043
To satisfy people who want me to play.	.785	.043
Because I feel pressure from other people to play.	.831	.032
Because if I don't other people will not be pleased with me.	.797	.038
Because I would feel ashamed if I quit.	.520	.098
Because I feel obligated to continue.	.752	.050
Autonomous Extrinsic regulation		
Because the benefits of sport are important to me.	.661	.044
Because I value the benefits of my sport.	.704	.041
Because it teaches me self-discipline.	.659	.049
Because it's a good way to learn things which could be useful to me	.750	.026

in my life.		
Because it's an opportunity to just be who I am.	.672	.051
Because it's a part of who I am.	.584	.043
Because it allows me to live in a way that is true to my values.	.675	.042
IM-General		
Because I enjoy it.	.814	.031
Because I like it.	.693	.058
Because it's fun.	.848	.025
Because I find it pleasurable.	.853	.024
Professional behaviour		
I always turn up with the correct kit for training.	.543	.060
I turn up for training with plenty of time to get ready.	.813	.027
I never miss a training session.	.804	.029
I am always on time for training.	.828	.022
I am professional in my approach to training.	.756	.036
Respect		
I have a high regard for my coach.	.779	.033
I respect my team-mates.	.788	.027
I am honest with coaching staff.	.780	.029
I show respect for my coach.	.757	.033
Commitment		
I am totally committed to achieving my goals.	.825	.023
I am highly motivated to succeed.	.745	.042
I am very competitive.	.621	.049
I am focused on succeeding in my sport.	.802	.032
Coping		
If I perform poorly I work hard to put things right.	.787	.029
If things don't go my way I try harder.	.747	.043
I am mentally strong.	.741	.037
I ask the coach for feedback on how I am doing.	.665	.051
Self Improvement		
I check if I am doing as well as I should be.	.787	.029
I do extra training in my own time if needed.	.781	.035
I am always willing to do extra workouts.	.720	.044
I assess my performance during every session.	.841	.019

Table2_Factor loadings and their standard errors. All factor loadings are significant at least at $p < .001$.

Subscales	Mean	Standard deviation	Minimum	Maximum
Needs support(Coach)	5.54	1.01	1.87	7.00
Needs support(Fellow athletes)	5.22	1.19	2.00	7.00
Needs support (Parents)	5.63	1.06	2.00	7.00
Competence	5.80	1.02	2.00	7.00
Relatedness	5.45	1.27	2.00	7.00
Autonomy	5.48	1.20	1.67	7.00
Volition	5.66	1.27	1.00	7.00
Choice	5.33	1.32	1.25	7.00
Internal perceived locus of causality	5.57	1.39	1.00	7.00
Controlled Regulation	2.84	1.54	1.00	6.83
Autonomous Extrinsic	5.76	1.03	2.00	7.00
Intrinsic Motivation	6.03	1.18	2.00	7.00
Professional behaviour	5.60	1.18	1.40	7.00
Respect	5.96	1.06	1.75	7.00
Commitment	5.91	1.01	2.00	7.00
Coping	5.76	1.07	1.75	7.00
Self Improvement	5.69	1.17	1.50	7.00

Table -3- Means and standard deviations for the subscales

		AVE	AVE sqrt	CR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	Needs support (Coach)	.45	.67	.93	1																	
2	Needs support (Fellow athletes)	.55	.74	.94	.50	1																
3	Needs support (Parents)	.47	.69	.88	.56	.38	1															
4	Competence	.60	.77	.81	.55	.42	.47	1														
5	Relatedness	.57	.75	.84	.48	.49	.45	.53	1													
6	Autonomy	.53	.73	.91	.59	.41	.47	.56	.76	1												
7	Volition	.60	.77	.75	.46	.34	.41	.49	.60	.76	1											
8	Choice	.62	.78	.86	.57	.37	.41	.58	.71	.95	.64	1										
9	Internal perceived locus of causality	.71	.84	.88	.53	.38	.45	.43	.70	.93	.60	.80	1									
10	Controlled Regulation	.56	.75	.88	-.12	-.04	-.12	-.14	-.08	-.02	-.03	-.01	-.01	1								
11	Autonomous Extrinsic	.45	.67	.85	.54	.41	.68	.53	.55	.54	.42	.49	.51	-.20	1							
12	IM-General	.65	.80	.88	.44	.44	.48	.32	.60	.66	.51	.57	.66	-.24	.67	1						
13	Professional behaviour	.57	.76	.87	.59	.38	.46	.62	.29	.39	.35	.42	.27	-.15	.50	.23	1					
14	Respect	.60	.78	.86	.60	.44	.52	.64	.47	.48	.41	.49	.38	-.19	.60	.40	.70	1				
15	Commitment	.57	.75	.84	.60	.48	.53	.62	.49	.59	.49	.57	.52	-.13	.61	.50	.72	.71	1			
16	Coping	.54	.74	.83	.50	.41	.43	.58	.46	.42	.41	.41	.32	-.23	.51	.38	.63	.69	.69	1		
17	Self Improvement	.61	.78	.86	.60	.41	.44	.63	.34	.42	.31	.48	.30	-.18	.49	.29	.78	.77	.71	.68	.68	1

Note: N= 310. $r \geq .112$ $p < .05$, $r \geq .147$ $p < .01$, $r \geq .187$ $p < .001$.

Table-4. Composite reliability (CR), average variance extracted (AVE), average variance extracted square root (AVE sqrt), and correlation of the factors in the measurement model.

3.11.2 Structural model

Figure 2 shows the PLS bootstrapped parameter estimates for the structural paths, and the variance accounted for in the dependent variables (R^2). The model explained between 2% and 45% of the variance in the dependent variables. There were large amounts of variance explained in perceived competence ($f^2=.56$), perceived relatedness ($f^2=.52$), and perceived autonomy ($f^2=.64$). The variance explained in controlled regulation ($f^2=.02$) was small. Large amounts of variance were explained in autonomous extrinsic regulation ($f^2=.64$), intrinsic motivation ($f^2=.83$), professional behaviour ($f^2=.37$), respect ($f^2=.57$), commitment ($f^2=.62$), and coping ($f^2=.39$). Finally, a small amount of variance was explained in self-improvement ($f^2=.32$).

3.11.3 Path coefficients: direct effects

The analysis showed that need support from coaches, fellow athletes, and parents were all positively associated with athletes' satisfaction of their basic needs for autonomy, competence, and relatedness. The effect of need support from coaches on autonomy was significantly greater than the effect of need support from fellow athletes ($t=3.847, p<.001$) and parents ($t=2.948, p<.001$). Competence was negatively associated with controlled regulation, and it positively predicted autonomous extrinsic regulation. Relatedness and autonomy were positively associated with autonomous extrinsic and intrinsic motivations. Controlled regulations were negatively associated with coping behaviours. Autonomous extrinsic regulation was positively associated with professional behaviour, respect, commitment, coping, and self-improvement. Intrinsic motivation was negatively associated with professional behaviour and positively associated with commitment.

3.11.4 Path coefficients: Indirect effects

Table 5 shows the indirect effects where there were intervening variables. For all the possible combinations of intervening variables, significant indirect effects were found. There were negative indirect effects of need support from coaches, fellow athletes, and parents on perceived controlled regulation through competence, and positive indirect effects of need support from coaches, fellow athletes, and parents on perceived autonomous extrinsic regulation through competence. There were positive indirect effects of need support from coaches, fellow athletes, and parents on perceived autonomous extrinsic regulation and

intrinsic motivations through relatedness. Moreover, there were positive indirect effects of need support from coaches, fellow athletes, and parents on perceived autonomous extrinsic regulation and intrinsic motivation through autonomy.

Competence had a negative indirect effect on coping through controlled regulation, and positive indirect effects on professional behaviour, respect, commitment, coping, and self-improvement through autonomous extrinsic regulation. Relatedness had positive indirect effects on professional behaviour, respect, commitment, coping, and self-improvement through autonomous extrinsic regulation, and positive indirect effects on commitment through intrinsic motivation, but a negative indirect effect on professional behaviour through intrinsic motivation. Autonomy had positive indirect effects on professional behaviour, respect, commitment, coping, and self-improvement through autonomous extrinsic regulation. Furthermore, there was a positive indirect effect of autonomy on commitment, and a negative indirect effect on professional behaviour through intrinsic motivation.

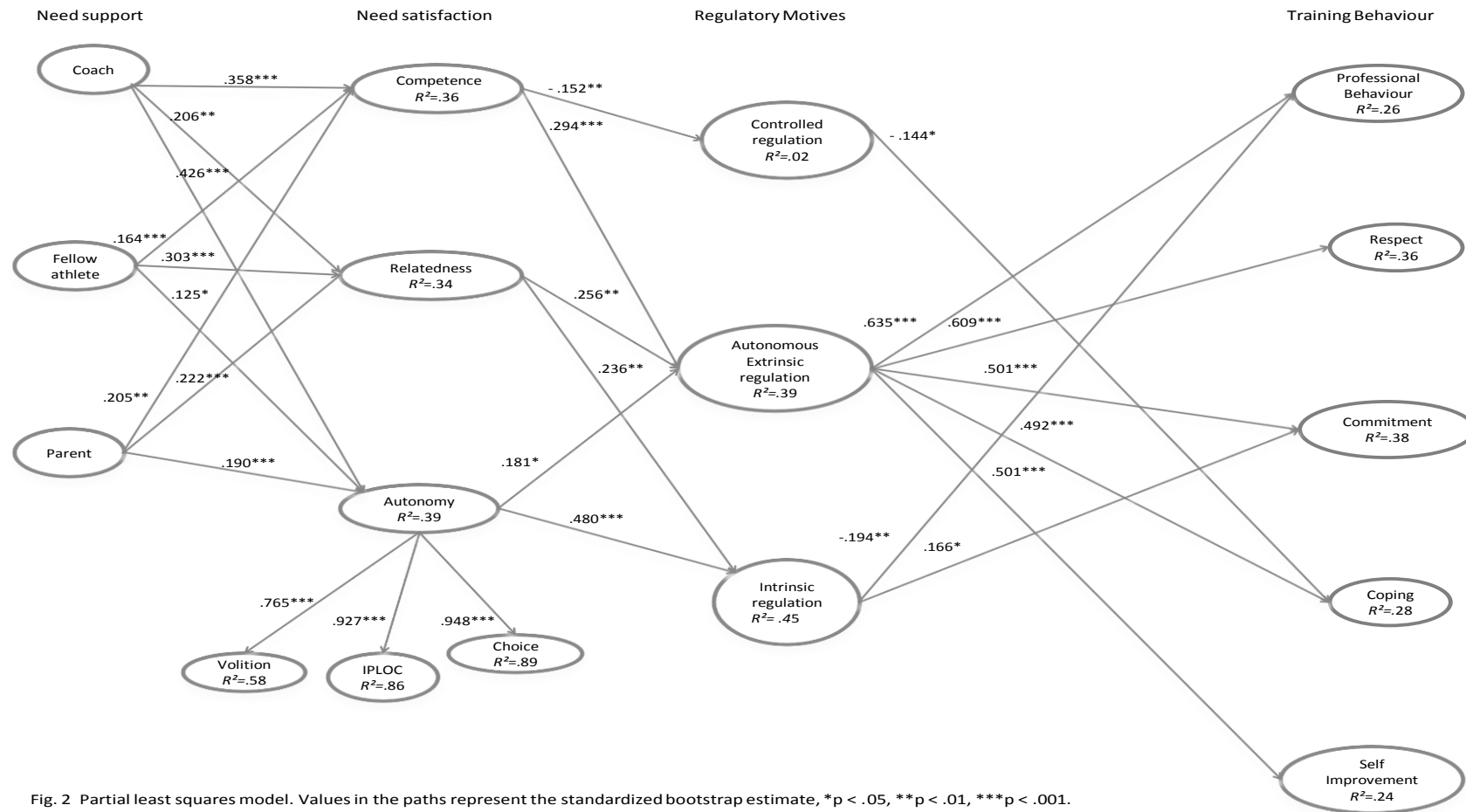


Fig. 2 Partial least squares model. Values in the paths represent the standardized bootstrap estimate, * $p < .05$, ** $p < .01$, *** $p < .001$.

From	Through	To	Effect	Confidence Interval 95%	
				Low	High
Need support (coach)	Competence	Controlled Regulation	-.054	-.101	-.016
Need support (coach)	Competence	Autonomous Extrinsic Regulation	.105	.473	.170
Need support (coach)	Relatedness	Autonomous Extrinsic Regulation	.052	.016	.100
Need support (coach)	Relatedness	Intrinsic Motivation	.048	.011	.097
Need support (coach)	Autonomy	Autonomous Extrinsic Regulation	.077	.009	.154
Need support (coach)	Autonomy	Intrinsic Motivation	.204	.122	.300
Need support (fellow athletes)	Competence	Controlled Regulation	-.024	-.051	-.005
Need support (fellow athletes)	Competence	Autonomous Extrinsic Regulation	.048	.013	.091
Need support (fellow athletes)	Relatedness	Autonomous Extrinsic Regulation	.077	.028	.139
Need support (fellow athletes)	Relatedness	Intrinsic Motivation	.071	.024	.130
Need support (fellow athletes)	Autonomy	Autonomous Extrinsic Regulation	.022	.001	.055
Need support (fellow athletes)	Autonomy	Intrinsic Motivation	.060	.012	.114
Need support (Parent)	Competence	Controlled Regulation	-.031	-.067	-.004
Need support (Parent)	Competence	Autonomous Extrinsic Regulation	.060	.020	.109
Need support (Parent)	Relatedness	Autonomous Extrinsic Regulation	.056	.081	.106
Need support (Parent)	Relatedness	Intrinsic Motivation	.052	.015	.100
Need support (Parent)	Autonomy	Autonomous Extrinsic Regulation	.034	.003	.075
Need support (Parent)	Autonomy	Intrinsic Motivation	.091	.037	.154
Competence	Controlled Regulation	Coping	.021	.001	.042
Competence	Autonomous Extrinsic Regulation	Professional Behaviour	.186	.106	.272
Competence	Autonomous Extrinsic Regulation	Respect	.179	.105	.257
Competence	Autonomous Extrinsic Regulation	Commitment	.147	.082	.221
Competence	Autonomous Extrinsic Regulation	Coping	.144	.084	.213
Competence	Autonomous Extrinsic Regulation	Self-Improvement	.147	.045	.217
Relatedness	Autonomous Extrinsic Regulation	Professional Behaviour	.162	.064	.268
Relatedness	Autonomous Extrinsic Regulation	Respect	.155	.062	.251
Relatedness	Autonomous Extrinsic Regulation	Commitment	.128	.050	.217
Relatedness	Autonomous Extrinsic Regulation	Coping	.125	.048	.206
Relatedness	Autonomous Extrinsic Regulation	Self-Improvement	.128	.050	.212
Relatedness	Intrinsic Motivation	Professional Behaviour	-.045	-.097	-.008
Relatedness	Intrinsic Motivation	Commitment	.039	.005	.086
Autonomy	Autonomous Extrinsic Regulation	Professional Behaviour	.114	.014	.221
Autonomy	Autonomous Extrinsic Regulation	Respect	.110	.013	.209
Autonomy	Autonomous Extrinsic Regulation	Commitment	.090	.011	.177
Autonomy	Autonomous Extrinsic Regulation	Coping	.089	.010	.172
Autonomy	Autonomous Extrinsic Regulation	Self-Improvement	.090	.011	.174
Autonomy	Intrinsic Motivation	Professional Behaviour	-.093	-.172	-.025
Autonomy	Intrinsic Motivation	Commitment	.079	.016	.152

Table 5 Indirect effects in the structural model.

3.12 Discussion

The present work aimed to examine the role of need support, psychological need satisfaction, and behavioural regulation in the promotion of adaptive training behaviours among female Egyptian track and field athletes in order to determine whether the theoretical tenets of SDT are relevant in an Arabic cultural context. Specifically, it was hypothesized that need support provided by coaches, fellow athletes, and parents would enhance athletes' perceptions of their psychological need satisfaction; need satisfaction would mediate the relationships between needs support and behavioural regulations, enhancing autonomous and intrinsic motivation, and reducing controlled motivation; that controlled regulation would be negatively related to adaptive training behaviours, whereas autonomous and intrinsic motivation would be positively related to adaptive behaviours.

Mean scores on all subscales apart from controlled regulation were very high, indicating that athletes had a very favourable perception of need support, and high levels of need satisfaction, intrinsic motivation and autonomous extrinsic regulation. In addition they reported high levels of positive training behaviours. However, these mean scores were very similar to those previously reported in the literature using the same scales with similar aged athletes. Need support scores were very similar to those reported by Ng *et.al* (2010). Mean scores on controlled and autonomous extrinsic regulations were similar to those reported by Lonsdale *et.al* (2008). Finally, mean scores on the training behaviours subscales were similar to those found by Oliver (2009). For the need support scales, it is not possible to make such a comparison as the scales used were adapted from scales designed to assess need support in different behavioural contexts and with very different respondents.

A measurement model analysis showed that several observed indicators had very low factor loadings. The majority of AVEs was greater than .5, although some factors were below the acceptable level [specifically, needs support (coach), needs support (parents), and autonomous extrinsic regulation]. In addition, five observed indicators had high cross loadings. Thus, some items were eliminated, and the model was re-estimated, as shown in Table 1. The model testing supported the acceptability of both the measurement and the structural models, and generally accounted for a substantial portion of the variance in the dependent variables. Large amounts variance were explained in perceived competence, perceived relatedness, and perceived autonomy. The variance explained in controlled regulation was small. Large amounts of variance were explained for perceived autonomous extrinsic regulation, intrinsic motivation, professional behaviours, respect, motivation, and coping. Finally, a small amount of variance was explained for self-improvement. The proposed patterns of causal sequences were generally supported by the model.

3.12.1 Direct effects

The findings from this study showed that the perception of the need support provided by the coaches, fellow athletes, and parents increased athletes' satisfaction with their needs for competence, relatedness, and autonomy. This finding is consistent with Wang, Koh, and Chatzisarantis' (2009) model in a sport domain, where social agents (such as coaches) impact on athletes' thoughts, feelings, and behaviours, and they have a positive impact on the three psychological needs, which ultimately will increase athletes' autonomous motivation.

In a sports context, coaches, parents, and fellow athletes can encourage autonomy by giving athletes freedom, volition, and responsibility for themselves

(e.g., giving opportunities to make choices and decisions). Furthermore, athletes are most affected by constructive feedback regarding their training progress, as it benefits their competence needs (Hein, Mүүr, & Koka, 2004). In an educational context, students' beliefs that they had strong support from parents and teachers enhanced autonomy and competence, and this, in turn, increased the students' intrinsic motivation for school (Reeve, Bolt, & Cai, 1999). In addition, in sports, when athletes experience warm relationships with their coaches (e.g., that they care about them and are concerned about their welfare), parents (e.g., are involved and care about them) and fellow athletes (e.g., helping each other to learn new skills and look after them), their feelings of affiliation will be enhanced, fostering training engagement and well-being. As suggested by Furrer and Skinner (2003) and Ryan and Powelson (1991) in the area of education, relatedness has a significant effect on academic motivation.

In the present study, it was also found that the effect of needs support from coaches on autonomy was significantly greater than the effect of needs support from fellow athletes and parents. This might be due to coaches being identified as the most important socializing agent in the sport context (Horn, 2002; Smoll & Smith, 2002). The promotion of autonomy support may be evidenced in the coaches' structure of the training sessions, the processes they use to make decisions, the provision of positive feedback regarding athletes' performance, as well as the motivational techniques used, and the personal relationship between the coaches and athletes.

The analysis showed that competence had a negative effect on controlled regulation. Similar results have been reported with Canadian college students in a

study by Vallerand, Pelletier, Blais, Briere, Senecal, and Vallières (1993), whereby perceived competence had a negative effect on controlled regulation. Conversely, perceived competence was positively associated with autonomous extrinsic regulation, consistent with Silva, Markland, Vieira, *et al.*'s (2010) work in promoting physical activity among overweight women, which showed that competence positively predicted autonomous motivation.

On the other hand, competence had no effect on intrinsic motivation, which is not consistent with previous research. For example, Bodoy and Yin (1996), Brustad (1998), and Ommundesen and Vaglum (1991) all found a strong relationship between perceived competence and intrinsic motivation in the domain of youth sports. However, the lack of an association with intrinsic motivation in the current study may be due to the shared variance observed among the measures of the three need satisfactions. Nevertheless, according to Deci and Ryan (1985), perceived competence should influence intrinsic motivation, provided that individuals also feel autonomous.

In the present study, relatedness and autonomy both had positive effects on autonomous extrinsic and intrinsic motivations. These findings are consistent with other research documenting the link between children's sense of belonging, motivation at school, and academic success (Anderman, 1999; Anderman & Anderman, 1999; Battistich, Solomon, Kim, Watson, & Schaps, 1995; Eccles & Midgley, 1989; Goodenow, 1993; Roeser, Midgley, & Urdan, 1996; Wentzel, 1998, 1999). A similar positive effect was also observed in a previous study where athletes' perceptions of their coaches' autonomy support were positively linked to intrinsic motivation and identified regulation, as well as, to a lesser extent, with introjected

regulation (Pelletier, Fortier, Vallerand, & Briere, 2001). This is in agreement with the literature on physical education, which has shown that relatedness is a positive predictor of intrinsic motivation, identified regulation, and introjected regulation (Ntoumanis, 2001). Moreover, with regard to the present results, there was no effect of relatedness on controlled regulation. In addition, there was no effect of autonomy on controlled regulation. This is in contrast with the previous findings from a study by Silva *et al.* (2010), which revealed that autonomy need satisfaction was a negative predictor of external regulation.

The last part of the direct effects tested the relationship between the motivational types and training behaviours. There was only one significant association between controlled regulations and the training behaviours, with controlled regulations negatively predicted coping behaviours. This may be because when athletes are more controlled by their coaches, athletes are less likely to take personal responsibility for dealing with the difficulties they face during training sessions. The finding was consistent with Amiot, Gaudreau, and Blanchard's (2004) finding that controlled motivation leads to disengagement-oriented coping (a negative coping behaviour) and this, in turn, results in less optimal outcomes such as an increase in negative affect from pre- to post-competition. The lack of any effects of controlled regulation on the other training behaviours suggests that for this population, controlled motivation does not undermine active engagement in training, but is also not conducive to it. Similar findings have been found in other behavioural domains. For example, Ingledew, Markland, and Ferguson (2009) found that external and introjected regulations were unrelated to exercise behaviour. Recent advances in the conceptualisation of basic needs in SDT have shown that

need satisfaction tends to be associated with positive outcomes whereas need thwarting is associated with negative outcomes (Bartholomew, Ntoumanis, Ryan, Bosch, & Ntoumani, 2011). Applying this to behavioural regulations, it might be that controlled regulation would be significantly associated with negative training behaviours, such as disengagement and withdrawal.

Autonomous extrinsic regulation positively predicted professional behaviour, respect, commitment, coping, and self-improvement. Athletes with a high level of autonomous regulation are likely to feel that it is important to them to develop their sport skills, and they are, therefore, more likely to invest significant effort in training. In contrast, intrinsic motivation only positively predicted commitment. This suggests that intrinsic motivation alone is insufficient to motivate a range of appropriate training behaviours. Similar findings have been reported in other contexts. For example, Rose, Parfitt, and Williams (2005) found that identified regulations (an autonomous extrinsic regulation) predicted exercise participation more strongly than did intrinsic motivation. Moreover, Ingledew and Markland (2008) found a positive effect of identified regulations (autonomous regulation) on exercise participation, whereas intrinsic motivation had a neutral effect on exercise participation. The analysis in the current study also revealed that intrinsic motivation negatively predicted professional behaviour, whereas autonomous extrinsic regulation was strongly associated with professional behaviour. This might be due to the fact that for athletes, turning up on time, having the correct kit, and so on, are not inherently interesting or fun behaviours. On the other hand, when athletes' motivations are identified or integrated, they are more likely to find that training sessions are useful

and important to them and they, therefore, are more likely to be on time and turn up with the correct kit for training.

3.12.2 Indirect effects of need support on behavioural regulation

The SDT prediction is that the effects of the social context on behavioural regulation are mediated by psychological need satisfaction (Guay, Boggiano, & Vallerand, 2001).

In a sport setting, Blanchard and Vallerand (1996) observed the mediating effect of perceived need satisfaction on the relationship between coaches' autonomy support and athletes' motivation. This finding implies that to the extent that athletes perceive that coaching behaviours allow them to feel competent, related with others, and autonomous, they will be more autonomously motivated and less controlled in their motivation. The current data show that there was a negative indirect effect of need support from coaches, fellow athletes, and parents on controlled regulation, and a positive, indirect effect on autonomous extrinsic regulation through perceived competence. There were also positive indirect effects of need support from the three sources on autonomous extrinsic regulation and intrinsic motivation through both relatedness and autonomy. A study conducted by Joesaar, Hein, and Hagger (2011) in a sports domain showed a significant role of task-involving peer climate and its impact on athletes' intrinsic motivation. According to Ames (1992) and Duda (2001), when athletes perceive social support as task-involving, they will be more intrinsically motivated toward their participation in sport. This is in agreement with Ryan and La Guardia (2000), who found that teachers who are seen as warm and caring instil greater intrinsic motivation in their students. This can also be related to achievement goal theory (Nicholls, 1984;

Dweck, 1986), which distinguishes goals in terms of ego involvement (performance goals) and task involvement (learning goals). Nicholls (1984) referred to ego involvement as entailing an external evaluative focus in which individuals seek to show high levels of ability in comparison to others, which is a relatively controlled goal orientation. Conversely, task involvement refers to individuals who are less concerned with their competitive standing relative to others, but who judge their success in terms of personal standards, which is relatively autonomous. Grounded in the principles of both achievement goal theory and SDT is the notion that task-involving climates provide greater chances for need satisfaction which, in turn, influences motivational processes (Quested & Duda, 2009).

3.12.3 Indirect effects of need satisfaction on training behaviour

The result of the analysis showed that there was a negative indirect effect of competence on coping through controlled regulation that is relevant to the Amiot, Gaudreau, and Blanchard (2004) finding discussed earlier. It is not surprising that athletes feel unable to invest their efforts in the face of setbacks if they feel more controlled. When regulated by controlled motives, an internal struggle is experienced from this pressure to satisfy a goal that is not aligned with the individual's sense of self, and his or her goals are more likely to be mentally exhausting and energy consuming, leading to less effective coping and increased difficulties (Moller, Deci, & Ryan, 2006). Relatedness had positive indirect effects on professional behaviour, respect, commitment, coping, and self-improvement through autonomous extrinsic regulation, and on commitment through intrinsic motivation.

In the present study, satisfaction with the need for autonomy had positive indirect effects on professional behaviour, respect, commitment, coping, and self-improvement through autonomous extrinsic regulation, and on commitment through intrinsic motivation. This is in agreement with Reeve, Jang, Carrell, Jeon, and Barch (2004), who found that teachers who adopt more autonomy-supportive instructional behaviours will improve students' engagement in school. Finally, autonomy satisfaction had a negative indirect effect on professional behaviour, and a positive indirect effect on commitment, both through intrinsic motivation. Again, this negative impact on professional behaviours is likely due to the fact that such behaviours are not inherently interesting.

In conclusion, the present study provides considerable support for the application of SDT within an Arabic/Muslim sport context. Indeed, this study is the first comprehensive analysis of the motivational sequence proposed by SDT within an Arabic or Muslim context, lending further support to previous cross-cultural research on the universal applicability of the theory. Furthermore, comparison of scores on the variables with those obtained from Western samples using the same instruments were very similar. The analysis centered on how need support from different social agents (coaches, fellow athletes, and parents) enhanced athletes' perceptions of psychological need satisfaction; need satisfaction enhanced autonomous and intrinsic motivation and reduced controlled motivation. Controlled regulation negatively related to an adaptive the training behaviour of coping, whereas autonomous motivation was positively related to adaptive behaviours. Intrinsic motivation had mixed effects, being negatively related to professional behaviours but positively associated with commitment.

3.12.4 Limitations and future research

The first major limitation of this study is that the data were cross-sectional. The motivational sequence proposed by SDT implies that there are causal effects of need support on need satisfaction and motivation, and on subsequent behaviours.

Experimental manipulations of the variables would be required in order to determine whether there are such causal effects. Another major limitation of the present study is that the measures were all self-reports. Athletes who respect their coaches, parents, and fellow athletes might report their coaches' behaviours in a positive way. Furthermore, self-presentation biases might have led athletes to present themselves in a positive light with regard to need satisfaction, motivation, and training behaviours. However, in the present study, the results revealed that the effect of need support from coaches on athletes' autonomy was significantly greater than the effect of need support from fellow athletes and parents, suggesting that the athletes were not simply responding uniformly in a positive way. Similarly, the relationships between motivation and training behaviours, and the indirect effects of need satisfaction on training behaviours, were not uniformly positive, with a negative association being observed between intrinsic motivation and professional behaviours. Nevertheless, it would be useful for future research to include observer reports of the socialising agents' need supportive behaviours, and coaches' reports of the athletes' training behaviours. This would avoid the limitations associated with self-reports.

To conclude, the present study provides support for the applicability of SDT in an Arabic cultural context. The findings help us to understand motivational determinants of adaptive training behaviours among female Egyptian athletes. Given

our interest in the problems faced by female athletes in other Arabic countries, particularly in Kuwait, future studies need to determine whether the theory is equally applicable in these more constrained cultural contexts (from the perspective of females' participation in sports). The next study extends upon the findings of the current study, and investigates this issue in the context of female sports in Kuwait. Moreover, although the current study provides cross-sectional support for SDT, from an applied perspective, the question remains as to whether the principles of need support derived from SDT could be implemented by the coaches of female sports participants in this context. Therefore, the next study will apply an intervention designed to enhance need support among coaches of female athletes in Kuwait.

Chapter Four

An intervention to enhance need-supportive behaviours among coaches.

CHAPTER FOUR

An intervention to enhance need-supportive behaviours among coaches.

The results of the second study offered supportive evidence for the application of SDT concepts within an Arabic context. The results showed that need support from the social environment (coaches, fellow athletes, and parents) was positively associated with athletes' perceptions of their psychological need satisfaction associated with competence, relatedness, and autonomy. In turn, need satisfaction was associated with enhanced autonomous and intrinsic motivation and reduced controlled motivation. Finally, controlled regulation negatively related to adaptive training behaviours, whereas autonomous and intrinsic motivation were generally positively related to adaptive behaviours. Therefore, the results support the applicability of SDT in an Arabic context. Building upon these findings, the present study was designed to investigate whether an SDT-based intervention could be applied within an Arabic context. In particular, the extent to which an SDT intervention can encourage need-supportive behaviours among Kuwaiti coaches is the focus of this study. The framework that will be produced in this study could have elements that can be generalized to other Arabic populations with regards to the promotion of autonomous motivation among women in sports. Although there is relatively little research within sporting contexts with regards to how autonomous motivation can be encouraged among coaches, some intervention studies have been conducted in the fields of physical activity and education, which can help provide a framework for interventions in sport.

4.1 Need-supportive coaching behaviour

Mageau and Vallerand (2003) suggest that the psychological experiences of athletes when engaging in activities are largely influenced by their coaches. Reinboth, Duda, and Ntoumanis (2004), Adie, Duda, and Ntoumanis (2008), and Gagne, Ryan, and Bargmann (2003) are among the scholars who have researched the impact of psychological need satisfaction in sports. Support for the basic needs of competence, relatedness, and autonomy encourage self-determination, resulting in higher levels of motivation that can be used to achieve goals. Hollembeak and Amorose (2005)

suggested that sustained engagement in sporting activities is determined by a solid, innate sense of self-determined motivation. According to SDT, there are three dimensions of a motivationally supportive social environment that correspond to the satisfaction of the three psychological needs (Connell & Wellborn, 1991; Deci & Ryan, 1991; 2000; Reeve, Bolt, & Cai, 1999; Ryan, Deci, & Grolnick, 1995): autonomy support, structure, and involvement. The provision of autonomy support (e.g., from coaches), requires making an effort to consider things from the point of view of others (e.g., the athlete), providing a non-demanding environment, and minimising pressure (Deci & Ryan, 1985; 2000; Black & Deci, 2000). In the context of sports, an autonomy-supportive coach would give their athletes choices, but keep these choices within a set of expected rules. They would express these rules clearly and listen to their athletes, help them to work independently, whilst guiding their development and providing relevant feedback. For example, smaller tasks, such as leading warm-ups, can be delegated to the athletes themselves. A number of studies within the context of sports have shown that autonomy-supportive environments lead to more adaptive behaviours and greater well-being among the athletes. Adie, Duda, and Ntoumanis (2008), Gagne, Ryan, and Bargmann (2003), and Alvarez, Balaguer, Castillo, and Duda (2009) have shown that athletes' sense of vitality and enjoyment of sports is enhanced by autonomy supportive and help for the satisfaction of their psychological needs. Amorose and Anderson-Butcher (2007) showed that need satisfaction and self-determined motivation can be facilitated by the provision of autonomy-supportive training environments.

Structure can be gained by giving the individual positive feedback, adequate help and support, and by providing him or her with optimally challenging tasks (Deci & Ryan, 1985; 2000). The need for competence can be satisfied when coaches vary the degree of difficulty in the training exercises that they set. Athletes can then choose how hard they push themselves, which creates opportunities for athletes to feel effective and successful when engaging in a task. Finally, involvement reflects the necessity of maintaining a relatedness-supportive environment, which demonstrates care for individuals and strong emotional ties that are very important to an individual's cohesiveness and friendship with others (Deci & Ryan, 1985; 2000). In a healthy environment for athletes, the coach cares just as much about the

individuals as about the team as a whole. This helps form strong social bonds and a climate that lets athletes feel safe. Relatedness support can be further broken down into qualitative and quantitative elements. For example, how coaches interact with athletes (positive reinforcement, approachability, feedback, and so on) are qualitative. In contrast, elements that are more measurable, such as how long the coach spends with the athlete, are quantitative. Duda (2001), Ntoumanis and Biddle (1999), and Duda and Hall (2000) also showed that intrinsic motivation can be affected productively by a supportive social environment. Table 1 summarises coaches' need-supportive behaviours that can satisfy the three physiological needs of athletes.

Need Supports	Coaches' Behaviours	Physiological Needs Satisfaction
Autonomy Support	Provision of options Pressures minimised Encouragement to initiate actions	Autonomy
Structure	Behaviour-outcome relations understood. Clear and realistic expectations. Positive feedback	Competence
Involvement	Emotional support Genuine interest Empathy	Relatedness

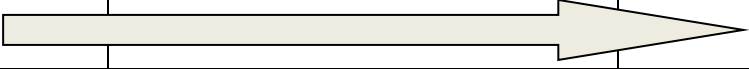


Table1

The three dimensions of a motivationally supportive environment that correspond to the three psychological needs. Adapted from Markland, Ryan, Tobin, & Rollnick (2005).

The provision of a relevant rationale, recognition of an actor's emotions, and the communication of a sense of choice are the three contextual factors that were identified by Deci, Eghrari, Patrick, and Leone (1994) to underpin the development of an autonomous motivational style and to stimulate internalisation. It has been shown that autonomy-supportive behaviours have important advantages in the

physical domain. In physical education classes, for instance, a positive connection has been determined between autonomy-supportive and psychological need satisfaction, and self-determined motivation for physical exercise in both physical education classes and leisure time activities (Hagger, Chatzisarantis, Barkoukis, Wang, & Baranowski, 2005; Hagger, Chatzisarantis, Culverhouse, & Biddle, 2003; Ntoumanis, 2005; Standage, Duda, & Ntoumanis, 2005, 2006). In the case of exercise, a positive correlation between autonomy-supportive and self-determined motivation, exercise goals, the amount of effort made, perseverance, and registration in physical activity clubs has been shown (Brickell, Chatzisarantis, & Pretty, 2006; Vansteenkiste, Simons, Soenens, & Lens, 2004; Wilson & Rodgers, 2004). In the domain of organised sports, a positive connection between autonomy-supportive and basic psychological need satisfaction, self-determined motivation, perseverance, and subjective vitality transformations have been observed, while in the same domain, a negative connection between autonomy-supportive behaviours, a lack of motivation, and the presence of certain physical symptoms has also been shown (Gagné, Ryan, & Bargmann, 2003; Pelletier, Fortier, Vallerand, & Brière, 2001; Reinboth & Duda, 2006; Reinboth, Duda, & Ntoumanis, 2004). Given that hostile control seems to contribute significantly to the socialisation of a fear of failure (Conroy and Coatsworth, 2007), it is likely that autonomy support arising from the appreciation of autonomous behaviour has greater efficiency in comparison to autonomy-supportive arising from demonstrating an interest in the performance of athletes. According to Conroy and Coatsworth (2006), the internalisation process mediates the impact of coach training on young athletes, involving the assimilation of perceptions of coaching behaviours into internal perceptions of oneself, which are closely connected to corresponding motivational outcomes.

4.2 Need-thwarting coaching behaviour

Recent research has begun to examine need-thwarting behaviours, which are those behaviours that actively undermine the satisfaction of the three psychological needs (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011). Bartholomew *et al.* proposed that need-thwarting is distinct from the mere absence of need support, and that it has unique outcomes that manifest in physical activity. Psychological

need thwarting has, until recently, received little attention in the literature, despite the fact that it is of significance to both theorists and practitioners. However, it has been shown that athletes' three needs (autonomy, competence, and relatedness) can be thwarted if their coaches exhibit cold interactions with them, and if their coaches provide a chaotic environment characterised by the presence of control or pressure (Van den Berghe *et al.*, 2013). Ryan and Deci (2000) pointed out that when the three main psychological needs of an individual are not met, the positive attitudes and actions of the individual will be controlled, and he or she will show signs of ill-being. Controlling coaching styles can have serious impacts on athletes, including such issues as ill-being and disordered eating (Bartholomew, Ntoumanis, Ryan, & Thogersen-Ntoumani, 2011). Deci and Ryan (2000) describe the sensation of being 'controlled' as a sense of pressure when carrying out activities.

It has been shown that some coaches do employ controlling tactics, such as promoting the ego involvement of athletes, using controlling statements, and picking on the athlete's weaknesses (Mageau & Vallerand, 2003), and this can have a negative impact on the athlete's experience of autonomy, competence, and relatedness. Pressure and control over the athletes may result in the emergence of controlled motives, and this means that their self-determined motivation is undermined. Essentially, athletes may end up taking actions, but they may not actually endorse or believe in those actions internally. In this case, the pressure on the athlete can lead to the detriment of the well-being of the athlete. Mageau and Vallerand (2003) suggested that this can lead to a negative situation in which sportspeople attempt to satisfy their coach's wishes, and maintain a satisfactory relationship with them, whilst thwarting their own psychological needs. Pelletier, Fortier, Vallerand, and Brière (2001) showed that control by coaches can encourage external regulation; while Blanchard, Amiot, Perreault, Vallerand, and Provencher (2009) showed that it can undermine athletes' psychological needs.

Table 2 shows a summary of the controlling strategies that were identified and used in the present study, alongside examples of their potential manifestation in the context of sports coaching. There are three key manifestations of need thwarting. The first is autonomy thwarting, which results in the creation of a highly controlled environment. This form of need thwarting exists in situations where it is

the coach's opinions and ideas that are forced upon the athletes with no consideration given to the athletes' specific perspectives. In an autonomy-thwarting context, a coach will exert his or her dominance by demanding respect and by interfering in the activities of athletes; the coaches will issue orders using controlling language, and they will establish rules and obligations; finally, the coach will pressure athletes by appealing to their feelings of pride and self-confidence, or by making them feel guilty or ashamed of their behaviour (Houlfort *et al.*, 2002; Van den Berghe *et al.*, 2013).

The second form of need thwarting is relatedness-thwarting, which results in the creation of what can be termed a 'cold' environment. This is achieved by coaches being openly unfriendly to athletes and even rejecting and excluding certain individuals. In this situation, a coach will pay little attention to the athletes; s/he will behave in a cold, unfriendly, and unapproachable manner, and the coach will distance her/himself from the athletes, appearing detached and uninterested (Ryan, 1996; Hollembeck and Amorose, 2005; Van den Berghe *et al.*, 2013).

The third and final form of need thwarting is competence-thwarting. This attitude and related behaviour results in the creation of a very chaotic environment for athletes. In a competence-thwarting situation, a coach will provide very few rules or requirements for the appropriate behaviour of athletes, and he or she will make few demands on them. Athletes will feel that their needs are thwarted, as the coach will waste time by reorganising groups and moving equipment around; they will not know the different athletes' names; the coach will essentially leave athletes to their own devices, doing nothing to prevent the ensuing lack of structure and disorder; finally, a competence-thwarting coach will employ an illogical and inconsistent structure both during training sessions and between different exercises (Amorose & Horn, 2000; Reeve & Jang, 2006; Van den Berghe *et al.*, 2013).

Need thwarting	Explanation	Supporting literature
Autonomy-thwarting, (controlling environment)	<p>The use of behaviours that are employed to impose opinions held by the coach upon athletes, ignoring the athletes' own perspectives.</p> <p>Examples:</p> <p>1-Exercises power over the athletes by interfering and demanding respect.</p> <p>2-Commands athletes, uses controlling language and imperatives.</p> <p>3-Pressures the athletes by making an appeal to their self-confidence or pride, or induces feelings of guilt and shame.</p>	<p>Houliort, Koestner, Joussemet, Nantel, Vivier, & Lekes; (2002).</p> <p>Van den Berghe et al. (2013)*</p>
Relatedness-thwarting(cold environment)	<p>The use of behaviours where coaches are unfriendly or even reject or exclude (some) athletes.</p> <p>Examples:</p> <p>1-Does not pay much attention to the athletes.</p> <p>2- Acts unfriendly and cold.</p> <p>3-Is distant from the athletes, is detached.</p>	<p>(Ryan, 1996)</p> <p>(Hollebeck & Amorose, 2005).</p> <p>Van den Berghe et al. (2013)*</p>
Competence-thwarting(chaotic environment)	<p>The use of behaviours when coaches provide few rules for adequate behaviour.</p> <p>Example:</p> <p>1- Loses time with the reorganization of groups, equipment.</p> <p>2-Does not know the athletes' names.</p> <p>3-Allows chaos, and leaves the athletes to it.</p> <p>4-Uses an illogical and inconsistent structure during the training session or in the transitions between exercises.</p>	<p>Amorose and Horn (2000).</p> <p>Reeve & Jang (2006).</p> <p>Van den Berghe et al. (2013)*</p>

Table 2 Identified controlling techniques in athletic training situations.

4.3 Intervention studies:

This part of the chapter will discuss some of the main intervention studies designed to enhance the provision of need support from authority figures across different

behavioural domains. The first study designed to enhance need support was an investigation conducted by Reeve in 1998 among pre-service teachers. The participants were provided with pamphlets that discussed the motivational constructs of autonomy support and autonomy in general. Following this, the self-reported Problems in Schools Questionnaire (describing the motivation-based problems children face in school, and the ways in which they may be helped in either autonomy-supportive or controlling fashions). It was found that following training, the teachers endorsed more autonomy-supportive responses, indicating that in terms of interpersonal motivation styles, autonomy support is something that can be taught. On the other hand, the effectiveness of the intervention was reliant on the causality orientation of the teachers. Causality orientations are conceptualized as relatively enduring aspects of people that characterize the extent to which they typically tend to be oriented towards autonomy, control, or whether they are typically amotivated. The ingrained ethos of autonomy-oriented pre-service teachers was in line with autonomy-supportive coaching. Control-oriented pre-service teachers, however, did not have the same ingrained ethos. However, Reeve's research focused on autonomy-supportive, and not on the other need-supportive behaviours, nor did it focus on need thwarting behaviours. The teachers that were given directions to utilize neutral or controlling techniques were not shown how to exhibit increased autonomous-oriented behaviours. On the other hand, the teachers who did use the autonomy-supportive training pamphlet were shown to display an increased autonomously-oriented approach.

Jolly *et al.* (2009) conducted research into an SDT-based exercise referral consultation in the context of health care and the promotion of physical activity. The researchers wished to discover the differences between STD-oriented and prescription fitness sessions when compared to treatment as usual, using two groups of referral practitioners. Thirteen exercise on prescription locations in Birmingham were randomly divided into either current practice (n=7) or an SDT-based intervention (n=6) condition. The SDT group were involved in exercise trials that aimed to address the development of an autonomy-supportive environment. It also aimed to look at the ways in which autonomous motivation of the participants' clients, in terms of behavioural change, could be encouraged. The SDT group were

trained in an autonomy-supportive style and given the opportunity to practice autonomy-supportive strategies. Participants viewed, discussed, and analysed sample video consultations, and they engaged in the problem solving of any issues that had surfaced. Next, a talk with the SDT group was held, which aimed to examine the potential difficulties or hurdles featured in the video, and the participants attended a video session which showed the SDT group being involved in a meeting about the topic. Lastly, after 4 months, the training involved the reminder of the previous training content and the chance to solve any problems that had arisen. Following training, the SDT group reported that they were satisfied with the knowledge they acquired, and they felt able to implement it.

In their research, Fortier *et al.* (2007) utilised the Canadian Physical Activity Counselling (PAC) trials in order to promote sports activities and exercise. These PAC trials were associated with autonomy-supportive behaviours and SDT. The PAC intervention model rested on three fundamental characteristics – namely, it ranked psychological needs in order and arranged them hierarchically; it employed interviewing techniques designed to inspire individuals; and, finally, it included an enjoyment enhancement component. The study participants were randomly separated into either the brief physical activity counseling (BPAC) group or the intensive physical activity counseling (IPAC) group. There were two elements to this study – namely, brief autonomy-supportive counseling (by the family physician), and intensive counseling (brief counseling plus intensive autonomy-supportive counseling by the PA counselor). For the BPAC group, a total of three training sessions were given to the participants' regular general practitioners (GPs) by a health care provider to ensure that they explained the necessary steps in an autonomy-supportive way. The study participants were given a personal action plan incorporating four of the five A's (address, advise, agree, assist, and arrange) by their usual GP in a short (maximum of four minutes) autonomy-supportive counseling session. A PA counselor was provided for the IPAC group study participants who underwent six in-depth autonomy-supportive counseling sessions over twelve weeks, as well as a one-hour inaugural session. These six meetings were divided between forty-minute face-to-face seminars and twenty-minute seminars conducted over the phone. Motivation was found to be greater in study subjects involved in the

in-depth counseling sessions than in those undertaking only the brief counseling sessions. It was also found that these motivational effects were maintained after the cessation of counseling. Additionally, higher autonomous motivation scores were recorded in the IPAC group after a period of six weeks than were recorded in the BPAC group.

Tessier, Sarrazin, and Ntoumanis (2008) implemented an intervention study designed to increase autonomy support, structure, and involvement among PE teachers. Following a baseline period for PE lessons during which observational measures of teachers' behaviours were taken, teachers randomly assigned to an SDT training group attended an informational session on adaptive student motivation and how to support it. To assess teacher behaviours, an observational grid developed by Sarrazin, Tessier, Pelletier, Trouilloud, and Chanal (2006) was used. This assessed the types of oral communication the teachers engaged in – whether they articulated in autonomy-supportive, controlling, or neutral ways. Training involved individualised guidance based on videos of their teaching sessions. It was found that the training did lead to the teachers exhibiting more need-supportive behaviours and techniques across all three dimensions with their students. Furthermore, the teachers' students benefited from these changes, showing greater need satisfaction, self-determined motivation, and engagement in PE classes. However, the sample size was very small in this study, with only two teachers in the experimental group and three in the control group.

In a further study, Tessier, Sarrazin, and Ntoumanis (2010) showed that training led to changes in the need-supportive behaviours of newly qualified PE teachers and, in addition, led to increases in the teachers' students' need-satisfaction, self-determined motivation, and engagement during lessons. However, the sample size in this study was also small, with only three teachers undergoing training, and there was no control condition.

McLachlan and Hagger (2010) examined the effects of training in autonomy-supportive methods among university postgraduate tutors. Tutors were randomly assigned to an experimental condition in which they received training in an autonomy-supportive or a control condition. The experimental group underwent two 20-minute informational sessions across the time span of seven days. The

positive effects of autonomy-supportive behaviours on the intrinsic motivation of students were discussed, as well as the role of autonomy-supportive behaviours and the principles behind self-determination theory, using real-life case studies to encourage the tutors to adjust their strategies and teaching behaviours (Session One). Following this, one week later, Session Two provided tutors with a synopsis of what had been previously covered during the first session. Session Two used role-play scenarios, and the researchers gave autonomy-supportive constructive criticism and praise on the tutors' ideas. The tutors were also encouraged to give their own thoughts on the usefulness of the suggested techniques. The researchers developed a comprehensive checklist of 14 autonomy-supportive behaviours (see below for details), which was administered at baseline and at two- and four-week follow-ups, along with a self-report measure of perceived autonomy support. The researchers found significant improvements in two observed autonomy-supportive behaviours in the experimental group (an increase in the time tutors' students spent talking, and a reduction in the directives and commands given by the tutors). The experimental group tutors also reported more perceived autonomy-supportive behaviours post-intervention. However, there were no changes in the other observed autonomy-supportive behaviours. Furthermore, as in the Tessier *et al.* (2008, 2010) studies described above, the sample size was very small (five tutors in the experimental group and four in the control group).

The research outlined above provides examples of academic research that shows that need-supportive behaviours can be trained. Specifically, the research outlined above demonstrates the ways in which social agents (i.e., teachers, coaches, trainers, lecturers, etc.) experience a positive behavioural change following the provision of need-supportive information and instruction. However, to date, no studies have examined need-supportive training among sports coaches. Furthermore, considering the results of the previous study conducted and reported in this thesis, it is of interest to determine whether need-supportive training can be implemented in the context of an Arabic culture.

4.4 Observational assessment of need-supportive and controlling behaviours

Most studies that have assessed the need-supportive or controlling behaviours of coaches and other social agents have employed self-reported measures of athletes' perceptions of the support they receive (e.g., Adie, Duda, & Ntoumanis, 2012). This was the method adopted in Study Two of this thesis. This approach is appropriate for studies examining the associations between perceptions of support, motivation, and/or behavioural or other outcomes. Such studies typically require large sample sizes, which may preclude the assessment of the actual behaviours of social agents. However, for intervention studies that aim to change social agents' behaviours, a better approach might be to assess social agents' actual behaviours by observing these behaviours, as was done in the studies by Tessier *et al.* (2008, 2010) and McLachlan and Hagger (2010), described above. For the present study, two such tools were adapted.

The first tool that the current study drew upon was McLachlan and Hagger's (2010) observational checklist for assessing autonomy-supportive behaviours among higher-education tutors. Based on the work of Reeve and Jang (2006), the measure assessed two categories of autonomy support. Primary autonomy-supportive behaviours included behaviours that were considered essential in autonomy-supportive teaching. The category of secondary autonomy-supportive behaviours comprised behaviours that have only been shown to be associated with perceived need support by students. The primary behaviours included the provision of a meaningful rationale for engaging in activities, the length of time of student discourse in the classroom, and the frequency with which students were encouraged to engage in activities. Avoidance of providing students with directives or commands, empathic statements acknowledging students' perspectives, and the provision of indications to help students overcome difficult tasks were considered as secondary behaviours. The observational tool comprised six primary and eight secondary behaviours, with raters recording the frequency of the occurrence of each behaviour during seminars run by the tutors.

The second tool that informed the assessment of behaviour for the current study was an observation tool that was used to evaluate the need-supportive and need-thwarting behaviours of PE teachers, as developed by Van den Berghe *et al.*

(2013), and based on the work of Haerens *et al.* (2013). Nineteen items aimed to examine the frequency and timing of the occurrence of observed need-supportive teaching behaviours during a regular PE lesson. Autonomy-supportive items included asking the pupils questions about their interests, problems, values, or wishes, and providing them with choices. Structure support items included offering pupils clear instructions, guidelines, tips, and advice. Finally, involvement items included taking the perspective of pupils into account, being empathic, and putting effort and energy into the lesson. Behaviours were coded every five minutes using a four-point frequency scale, with responses ranging from 0 to 3. Dimensional scores were created by averaging those items, reflecting each of the three need-supportive teaching dimensions. The observational tool also tapped into 16 need-thwarting teaching behaviours to assess the observed dimensions of (1) controlling behaviours (e.g., the teacher exercises power over the students by interfering and demanding respect, commands students, uses controlling language and imperatives; is irritated; loses his patience); (2) cold behaviours (e.g., teacher does not pay much attention to the students, acts unfriendly and cold); and (3) chaotic teaching (e.g., teacher loses time with the reorganization of groups and equipment, does not know the students' names). These behaviours were also coded on a four-point scale every five minutes of the lesson. For the total duration of the lesson, a sum score for each behaviour was calculated and then divided by five for each lesson in order to obtain a score for the exhibition of the behaviours across each five-minute period. Then, the dimensional scores were calculated, as was done for the three need-supportive teaching dimensions.

4.5 The current study

The objective of the current study was to establish whether an SDT-based intervention can be introduced in the Arabic context, and specifically the ways in which an SDT intervention could encourage autonomy-supportive behaviours among Kuwaiti coaches. Essentially, it must be determined whether or not need-supportive training can positively change the behaviour of coaches. For the present study, an observational approach to the assessment of need-supportive behaviour was

adopted using adaptations of the tools developed by McLachlan and Hagger (2010) and Van den Berghe *et al.* (2013).

4.6 Hypothesis

It is hypothesised that relative to a control condition, training in the principles of SDT and the provision of need-supportive behaviours would increase need-supportive behaviours and decrease controlling behaviours among coaches of Kuwaiti female athletes.

4.7 Method

4.7.1 Participants

Thirty coaches from different sporting clubs in Kuwait were selected for the research; all of the coaches trained adult female athletes. There were eight females and 22 males in the sample with a mean age of 37.34 years ($SD=9.83$). The coaches had a mean level of coaching experience of 9.46 years ($SD=4.75$). Eight coaches trained track and field athletes, seven trained handball players, 10 trained volleyball players, and five trained tennis players.

4.7.2 Study design

Figure 1 illustrates the intervention procedures. The 30 participants in the baseline observation were randomly divided into two equal groups – a treatment group and a control group. Each of the two groups was subsequently divided into two sub-groups ($n=7$ and $n=8$) that were involved in two training sessions with a three-day interval between them. The second observation was conducted after three days of these training sessions.



Figure 1. Flow diagram of the intervention procedures

4.7.2.1 Measures

The purpose of this study is to contribute to the existing research regarding the need-supportive behaviour of coaches and the manner in which they interact with athletes during training sessions. To this end, the study builds upon previous research and encompasses a wide range of need-supportive behaviours, while relying on the direct observations of the behaviour of coaches, instead of on self-reports by the coaches. To measure the behaviours, a list of target behaviours was formulated for this study, which was based on the measures developed for academic and physical education contexts by McLachlan and Hagger (2010) and by Haerens *et al.* (2013) and Van den Berghe *et al.* (2013). Behaviour items were selected or adapted on the basis that they would be readily applicable within an Arabic context. The measure comprised four categories of behaviours: controlling coaching behaviours; cold coaching behaviours; chaotic coaching behaviours; and need-supportive behaviours.

4.7.3 Measures of need-supportive and controlling behaviours

4.7.3.1 Controlling coaching behaviour

The first category, controlling coaching behaviour, referred to coaches who demanded respect from their athletes through the use of controlling language. Additionally, increased pressure or attacks to athletes' pride and self-confidence fell into this category. Any negative language, rejection of athletes' input, or the frequency of demands that were made were also recorded in this category.

4.7.3.2 Cold coaching behaviour

Cold coaching behaviour referred to having a distant or unenthusiastic nature of coaching towards the athletes.

4.7.3.3 Chaotic coaching behaviour

Chaotic coaching behaviour involves poor time management, poor group control, or a lack of necessary equipment. It also referred to the allowance of chaos, the neglect of athletes' names, or the lack of influence on an athlete's activities. Such coaches tended to have loose structures of training that they implemented.

4.7.3.4 Need-supportive behaviour

Behaviours that fell into the 'need-support' category included the acknowledgement of an athlete's input, providing a meaningful rationale, showing understanding, and spending time listening to the athletes. Additionally, the provision and communication of positive encouragement and feedback, as well as the number of replies to athletes' questions, were also considered in this category. It also involved expressions of empathy and acknowledgement of the athletes' perspectives. The information was used as a checklist during the observational process, in order to recognize if and when these behaviours occurred throughout the coaches' training sessions. Frequencies of the occurrence of the behaviours were counted across training sessions. Table 3 shows the specific behaviours for each category.

Behaviours

A- Controlling coaching behaviour

- 1-Exercises power over the athletes by interfering and demanding respect.
- 2-Commands athletes, uses controlling language and imperatives.
- 3-Pressures the athletes by making an appeal to their self-confidence or pride, or induces feelings of guilt and shame.
- 4-Uses destructive criticism.
- 5-React negatively to their input.
- 6-Frequency of statements that the athletes should, must, have to, have got to, or ought to do something.

B- Cold coaching behaviour

- 1-Does not pay much attention to the athletes.
- 2- Acts unfriendly and cold.
- 3-Is distant from the athletes; is detached.

C-Chaotic coaching behaviour

- 1-Loses time with the reorganization of groups, equipment.
- 2-Does not know the athletes' names.
- 3-Allows chaos, and leaves the athletes to it.
- 4-Uses an illogical and inconsistent structure during the training session or in the transitions between exercises.

D-Need-supportive behaviours**1-Offering encouragement:**

Frequency of statements used to boost or sustain the athletes' engagement, such as "Almost" and "You're close."

2-Providing a meaningful rationale

Providing athletes with a personally meaningful explanation for what they are doing.

3-Time spent listening

Frequency with which the coach carefully and fully attended to the athletes' speech, as evidenced by the number of verbal and nonverbal signals of active, contingent, and responsive information processing.

4-Praise as informational feedback

Frequency of statements that communicate positive and effective feedback about the athletes' improvement or mastery, such as "Good job" and "That's great."

5-Being responsive to athletes' generated questions

Frequency of contingent replies to an athlete's generated questions or comments, such as "Yes, you're right" and "Yes, you have a good point."

6-Making perspective-acknowledging statements

Frequency of empathic statements to acknowledge the athlete's perspective or experience, such as "Yes, this is difficult."

Table 3 The observational checklist.

4.7.4 Procedure

Ethical approval was gained from the School of Sport, Health, and Exercise Sciences at Bangor University, and sports administrators from Kuwaiti organizations were contacted for their approval. The coaches were given two weeks' notice before the commencement of the study; they were provided with information about the study and the methodology that would be utilized. The coaches were informed that they would attend two discussion sessions on effective coaching, each lasting for 30 minutes. They would be observed for two coaching sessions – one prior to the discussion sessions, and one following the discussion sessions – to provide the study with information on the behaviours that coaches engage in. The possible benefits of taking part in this study were explained. Coaches were told that the study could identify coaching behaviours and techniques that could be tailored to facilitating athletes' motivation. Following that, consent forms were provided to the participants. Coaches were informed that they would be given a code, and that their names would not be used in data storage or in the dissemination of the findings to ensure effective confidentiality and anonymity. The data were collected in athletics clubs in Kuwait. Thirty coaches were randomly assigned to either an experimental condition or a control condition. Baseline behavioural assessments of need-supportive behaviours displayed by each coach were made during a coaching session using the checklist of target behaviours. Sessions lasted between 35 and 40 minutes. Following this, coaches in the experimental condition attended the two training

workshops on need support. The sessions lasted 30 minutes each, and were held 3 days apart from one another.

The first session was divided into four components. In the first component, the concept of self-determination was explained, focusing specifically on how intrinsic and extrinsic motivators can be applied to coaching in order to satisfy one's basic psychological needs and to develop more autonomous motivation. In the second component the benefits of need support to athletes was explained. This was aided by showing the coaches the results of the author's second study, which found that greater need support among athletes led to more positive training behaviours. In the third component, behaviours that could help coaches to become more need-supportive and less controlling were explained. The final component included a question-and-answer session that allowed coaches to fully understand the nature of the workshop. The coaches were asked about how they could apply these new interventions in their training sessions, so that they understood the practical applications of the theory. Table 4 outlines the components of the two training sessions. Training session slides for the SDT group are presented in Appendix Q.

The control group attended two sessions that were of equal duration to those attended by the SDT group, which covered effective coaching methods, suitable athlete training techniques, and communicative strategies to encourage the coaching process presented in Appendix R. This was delivered in the form of a series of discussion questions in which coaches were asked about their opinions on effective coaching methods, techniques that athletes could use to maximise their training, and the best ways to convey information to their athletes. Table 5 outlines the content of the sessions. The experimental and control groups were further divided into two groups of seven and eight individuals for the training sessions. The sessions and data collection were conducted in Arabic before being translated into English. The slides in the training sessions, the observational checklist, and the discussion questions were initially developed in English before being translated into Arabic, and they were back-translated once more. Two weeks after the training sessions, each coach was observed during a second training session using the behaviour checklist to record post-test need-supportive and controlling behaviours.

Component	Details
<p>One</p> <p>Two</p> <p>Three</p> <p>Four</p>	<p><u>Session one</u></p> <p>Key concepts of self-determination theory: (need support, psychological needs, self-regulations). Distinction between intrinsic and extrinsic motivation. Meaning of autonomy. Conditions of need-supportive behaviours. Role of need-support.</p> <p>Benefits of providing need-support to athletes. Empirical evidence of study two was presented.</p> <p>Outlining the behaviours to become more need supportive.</p> <p>Answer coaches' questions about the intervention.</p> <p><u>Session two</u></p> <p>Discussion of the previous session was delivered. Outline of the target behaviours. Coaches were asked to demonstrate how to put each of the behaviours into practice within a training session. Conditions of need-supportive behaviours.</p>

Table 4. Outline of the training sessions for the SDT group.

Component	Details
<p data-bbox="236 264 422 421">Coaching experiences and methods</p> <p data-bbox="236 949 459 1048">Athletes' behaviour and training</p>	<p data-bbox="496 264 635 293"><u>Session one</u></p> <ol data-bbox="496 327 1326 875" style="list-style-type: none"> 1. What kind of coaching methods do you employ in your training sessions? Can you give examples? 2. How do you try to engage your athletes? 3. How do you think you can help athletes to train effectively? 4. What do you feel are the biggest challenges you face in your training? 5. What do you think is the best way of conveying information to your athletes, e.g., visual, verbal? 6. How do you take account of the possibility that your athletes may have differing levels of knowledge and may train at different rates? <p data-bbox="496 913 635 943"><u>Session two</u></p> <ol data-bbox="496 976 1342 1328" style="list-style-type: none"> 1. What do you think athletes feel are good qualities for a coach to have? 2. How do you think athletes can maximise their training? 3. How do you think you can facilitate your athletes to work effectively outside the training session environment? 4. What athlete behaviours do you think obstruct their training experience in training sessions?

Table 5. Discussion questions used with the control group coaches.

4.7.5 Main analyses

For the data analyses, frequencies of the occurrence of each behaviour exhibited by the coaches were recorded. Because these data represented frequency counts, there was no upper limit to the possible scores. Levene's test supported the homogeneity of variance between the groups for all variables. Mixed-model (group \times test, with repeated measures on the test) ANOVAs were employed to assess whether interactions between each condition and the wave of data collection were present for the controlling coaching behaviours and the cold coaching behaviours. Independent- and related-samples Tukey's tests were used to probe significant

interaction effects. It was noted that there were substantial differences between groups in pre-test scores for chaotic and need-support behaviours (SDT group: chaotic mean=22.20; need-support mean=27.20; control group chaotic mean=16.93; need-support mean=34.40). Two independent sample *t*-tests showed that these differences were close to significant or significant (chaotic behaviours $t=1.95$, $df=28$, $p=.06$; need-supportive behaviours, $t=-2.03$, $df=28$, $p<.05$). Given these differences, results of a repeated measures ANOVA could be difficult to interpret. Therefore, one-way between groups analyses of covariance (ANCOVAs) with pre-test scores as the covariates were conducted for chaotic coach behaviours and need support.

4.8 Results

4.8.1 Controlling and cold behaviours

Table 6 shows the means and standard deviations for controlling and cold behaviours. ANOVA showed a significant group \times test interaction for controlling behaviours ($F(1, 28)=42.01$, $p<.001$, partial eta squared=.61). Moreover, there was a significant group \times test interaction for cold behaviours ($F(1, 28)=19.34$, $p<.001$, partial eta squared=.35). Tukey's follow-up tests showed significant pre-test to post-test reductions in controlling ($p<.001$) and cold behaviours ($p<.001$) in the SDT group, whereas the control group remained constant across the time period. Follow-up tests also showed that the SDT group scored significantly lower than the control group at post-test on controlling behaviours ($p<.001$) and cold behaviours ($p<.001$) (see Figures 2 and 3).

Behaviour	Experimental condition			
	Experimental		Control	
	Time 1	Time 2	Time 1	Time 2
Control	60.80 (20.09)	44.26 (19.98)	65.26 (14.11)	65.00 (12.76)
Cold	19.66 (06.44)	12.93 (04.39)	16.93 (05.41)	17.33 (06.43)

Table 6. Means (standard deviations) for the controlling and cold behaviours.

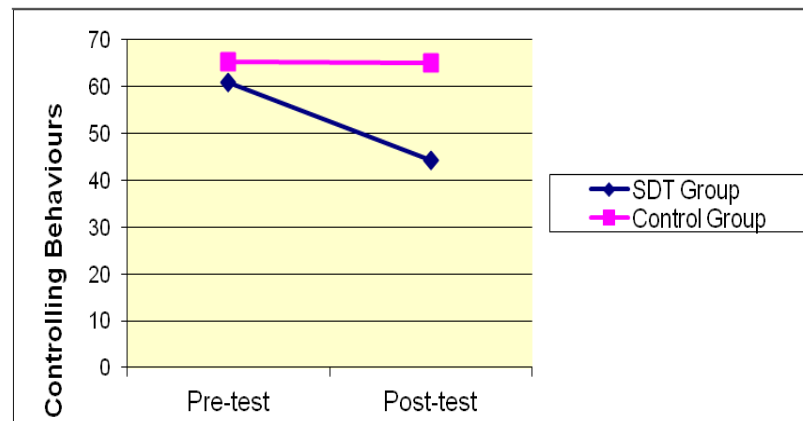


Figure 2. Group \times test interaction for the frequency of controlling behaviours.

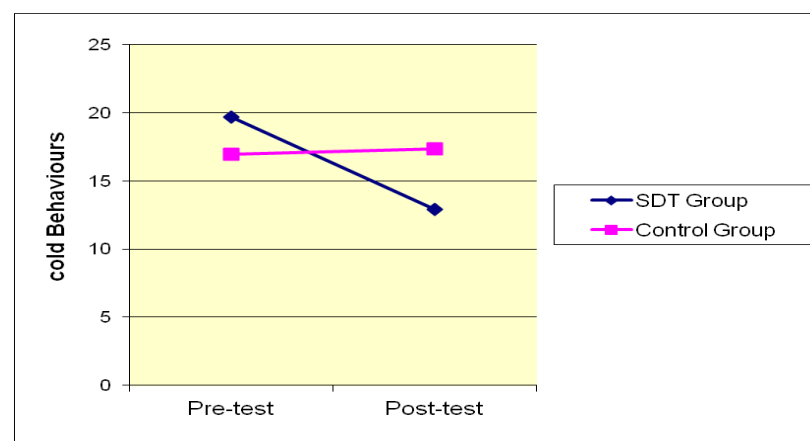


Figure 3. Group \times test interaction for the frequency of cold behaviours.

4.8.2 Chaos and need-supportive behaviours

As noted above, there were substantial differences between groups on chaotic and need supportive behaviours at the pre-test period. After adjusting for pre-test scores, ANCOVA showed that the SDT group scored significantly lower than did the control group on the chaotic behaviours at post-test ($F(1, 27)=8.50, p<.01$, partial eta squared=.24). There was no significant difference between the two groups on post-test scores with respect to need-supportive behaviours ($F(1, 27)=.733, p=.39$, partial eta squared=.02). Table 7 shows the unadjusted means and standard deviations, as well as the adjusted means and their standard errors for the two variables

Behaviour	Experimental condition			
	Experimental		Control	
	Unadjusted mean	Adjusted Mean	Unadjusted mean	Adjusted mean
Chaos	16.00 (04.97)	15.17 ((01.12))	19.13 (04.51)	19.96 ((01.12))
Need support	43.73 (09.19)	46.89 ((03.99))	45.06 (22.13)	41.90 ((03.99))

Table 7. Unadjusted means (standard deviations) and adjusted means ((standard errors)) for the chaotic and need-supportive behaviours at post test.

4.9 Discussion

The goal of this research was to establish whether an SDT-based intervention can be introduced in the Arabic context and, specifically, the ways in which an SDT intervention could encourage autonomy-supportive behaviours among Kuwaiti coaches. Experimental coaches were given two brief classes in SDT: need support, and the ways in which they could change their delivery of training in order to be more supportive of the basic psychological needs of their athletes. Although control group coaches were not given any SDT-based training, they participated in two dialogue-based meetings, so they had as many contact hours as the experimental coaches. The findings suggest that the intervention of the experimental coaches did change their behaviour to a moderate degree, and this suggested that brief interventions have the potential to change the ways in which coaches deliver training to athletes in ways that are consistent with SDT. On the other hand, the present intervention appears to have reduced controlling behaviours, although it had no greater impact on need-supportive behaviours than in the control condition. Moreover, these findings contrast with those of Tessier, Sarrazin, and Ntoumanis (2008), who found an increase in autonomy-supportive behaviours in their SDT group, but no difference in controlling behaviours. This difference might be due to the features of their training programme for the context of PE, which was different to that of the present study context. In the Tessier *et al.* study, following each lesson, the experimenter and the teacher used videos of the teachers' interactions with their students to analyse the teacher's interpersonal style in order to help the

teachers improve their autonomy-supportive behaviours and to reduce their controlling behaviours. Furthermore, in the present study the observations focused more on controlling behaviours and less on need support. Finally, the differences might have been a result of the measurement tools employed. In the Tessier *et al.* (2008) study, autonomy-supportive behaviours were coded via an observational grid, which distinguished between different categories of teachers' oral communications (i.e., autonomy-supportive, controlling, and neutral). In the present study, the observational checklist included assessments of overt non-verbal as well as verbal behaviours.

The results of present study revealed that need-support was increased in both groups (SDT and control). This could be explained by the content presented to the control condition in terms of the nature of the workshop. Specifically, the improvement in need-supportive behaviours in the control group might be due the content of the workshop, which aimed to enhance coaching style, engage athletes and how to convey information. The workshop would have inherently included elements of structure, which could have led to the observed improvement in need support in the control group. Thus, although there was no difference at post-test in need support between the two groups, this does not necessarily mean that the SDT training did not enhance these behaviours.

Of particular interest is the fact that this study was conducted within an Arabic context, and it supported the position of SDT, and the results of previous research, which posits that the principles of SDT are universal and, that the supposed social environmental predictors of autonomous motivation are applicable, and indeed trainable, across different cultures (Deci & Ryan, 2003; 2008).

Furthermore, the current research brings forward a valuable (and brief) method that can be used to avoid thwarting need behaviours that could be applied in other fields and other cultures. A thorough procedure was followed in the creation of the behavioural evaluation checklist, which was based on existing interventions in the context of education (McLachlan & Hagger, 2010) and PE (Van den Berghe *et al.*, 2013). Essentially, an observational framework is available for the assessment of the extent to which interventions attempt to avoid a need-thwarting coaching style.

Observational research methods can generate insights into need-thwarting and need-supportive behaviour to facilitate an in-depth investigation of motivational structures in sports.

4.10 Limitations of the intervention and further study

This research was potentially restricted by the relatively small number of coaches involved, although the sample size was considerably larger than those of the Tessier *et al.* (2008) and McLachlan and Hagger (2010) studies described earlier which, among the interventions described in the literature, are closest in design to the current study. Nevertheless, the results may not be generalizable across a wider and more varied coaching population. The study also suffered because it was conducted over a short period of time, so the window for coaches to realize these behavioural changes was quite small. Furthermore, it was not possible to conduct a follow-up assessment over a longer period of time following the initial intervention, so as to assess whether coaches were integrating autonomy-supportive practices and continuing to reduce their need-thwarting behaviours. Other research has indicated that extended training programmes are more likely to generate behavioural change with regard to autonomy-supportive methods (e.g., Chatzisarantis & Hagger, 2009). Extending the period of training and gradually introducing the interventions, emphasizing one particular action per session, could improve the effectiveness of the behavioural adjustment procedure in future cases.

The most important limitation is that there was only one researcher present to record the behaviours. Ideally, at least two observers would have been used so that the inter-rater reliability of the assessments could have been assessed. However, the resources needed to include more observers were not available. Alternatively, the coaching sessions, or a sample of them, could have been video-recorded and independently scored by another rater, as in McLachlan and Hagger's (2010) study. This would have allowed for the assessment of inter-rater reliability, based on the assessment of independent observers of the filmed activities drawn from the training sessions, which could then be contrasted with the information recorded by the primary researcher. However, the agreement of the coaches and athletes to be filmed could not be attained, so this was not possible.

There is a further problem associated with having only one observer in the current study, especially since the observer was me as the lead researcher. This is that I might have been unconsciously biased (or even deliberately biased) toward recording more positive behaviours in the experimental group. This is difficult to rule out without having had independent observations. However, if this was the case, one might expect uniformly positive results in favour of the SDT condition. The pre-test differences in chaotic behaviours and need support and, most notably, the fact that need support was improved in both groups at post-test give some indication that such biases were not necessarily in operation. Therefore, we can have some confidence in the idea that the SDT intervention was actually effective in reducing controlling behaviours. Further research, using a more neutral control condition, is necessary in order to determine whether the SDT training employed in this study is, in fact, effective in increasing need-support behaviours.

Another potential problem concerns the demand characteristics of the experimental situation. Knowing that they were being observed by the researcher, the coaches in the SDT condition might have tailored their behaviours during the second observation period in ways that favoured support for the study hypotheses. If this were the case, it could be that they would not continue to implement the principles of their training in their normal practice following the completion of the study. This would be very difficult to control for given the current design, without surreptitiously observing the coaching sessions. However, this would clearly not be possible for ethical reasons. It would have been good to have assessed perceived need support by the athletes both pre-and post-test, as this would have given some independent evidence for the efficacy of the intervention. A final limitation of this study is that it only focused on evaluating change in the coaches' behaviours. It remains to be seen whether implementing a training program such as this with coaches would impact upon their athletes. Future studies could also assess whether the need-thwarting and need-supportive dimensions observed in this study influence athletes' outcomes, including their need satisfaction, motivation, training behaviours, and well-being related outcomes.

In summary, the present study demonstrates that a brief intervention with coaches based on SDT results in significant decreases in need thwarting behaviours,

it and may have a positive impact on need-supportive behaviours. Importantly, this is the first study to employ an SDT-based intervention within an Arabic context. Despite the very different cultural context of women's sports in Kuwait, in comparison to that of women in sports in the Western world, the coaches seem to have been willing and able to implement the principles of SDT into their training practices. This bodes well for future research examining the application of SDT in countries such as Kuwait, not just in sports, but perhaps in other domains such as education and health care.

Chapter Five

General Discussion

CHAPTER FIVE

General Discussion

5.1 Overview of studies

Three studies are explored in this thesis. The first study was a qualitative assessment of factors that prevent Kuwaiti women from participating in international track and field competitions. My personal experience of the status quo in Kuwait motivated me to explore Kuwaiti women's lack of engagement in international events and contrast their experiences with those of female athletes from Egypt. As well as examining athletes' attitudes, I investigated the attitudes of coaches, administrators, and parents of sportspeople through a qualitative process. These informants were chosen because they were likely to have the most influence on female sport participation. Egypt was chosen as a comparison due to its similar history with Kuwait, similar Islamic rules, and overall having an Arabic Muslim society. However, it must be taken into consideration that there are some differences in the culture and traditions of Kuwait and Egypt. Also Egypt already has a strong history of females engaging in sport in a multitude of events. Most importantly there are signs of progress in Egyptian female track and field athletics, as opposed to Kuwait. It was these differences that helped to provide a meaningful comparison with the situation of female athletes in Kuwait.

There is little research on the participation of Muslim women in athletics, and specifically little attention has been paid to those from Kuwait. This is an important gap that needed to be filled. The study findings can also cast light on other Islamic societies in which women do not have access to the same opportunities as men, when it comes to attending international sporting events.

The results from Study One showed that there is regional variation between Kuwait and Egypt with regard to barriers to female participation in sport. For example, in Kuwait the society, traditions and sometimes athletes' families object to women participating in sporting events and they oppose integration of women and men in sport. In contrast, in Egyptian society, tradition and families recognize that women should participate in sport and they support greater gender balance in that respect. However, the two countries are similar in that there is a lack of regulations

and organisation for professional women's sport, and they are both working with restricted resources, equipment and facilities, both in terms of quality and age.

Despite these common problems, Egyptian athletes are able to engage at the international level and have taken part successfully in the Olympics and other major international events. A question emerging from Study One was, despite the organizational and practical barriers they face, how are Egyptian female sportspeople motivated to mobilise the effort and commitment to their sport to give themselves the opportunity to achieve the levels of performance required to take part in international sporting tournaments? Furthermore, Study One also showed that support from different social agents, especially parents and coaches, is a main source of encouragement for engagement in athletics. As a result, the goal of the second study was to examine social and motivational processes underpinning sporting behaviours in Arabic women's sport. To this end, the theoretical framework of self-determination theory (SDT: Deci & Ryan, 1985) was adopted, a contemporary theory of motivation which considers both individual factors and the influence of the social environment on individuals' motivation and behaviour. Specifically, the study examined the impact of female Egyptian athletes' perceptions of the support offered by coaches, parents and fellow athletes on their perceptions of autonomy, competence, and relatedness, the facilitation of self-determined motivation and optimal training behaviours. The results generally confirmed the motivational sequence proposed in SDT whereby perceptions of a need supportive social environment facilitates satisfaction of basic psychological needs, which in turn leads to greater self-determined motivation and less controlled motivation, leading to more optimal or adaptive behaviours.

Whilst Study Two showed support for the application of SDT to the context of Arabic women's sport, it was cross-sectional and relied upon self-report data. Furthermore, it was conducted within an Arabic culture that, as shown in Study One, is largely supportive of women's engagement in sport. It therefore does not directly address the author's principal concern, which is the plight of women in sport in Kuwait. As a result, the third study aimed to explore the question of whether the motivational principles of SDT could also be applied in Kuwait using an experimental design to determine whether an intervention based on SDT could encourage

autonomy-supportive behaviours and reduce controlling behaviours among Kuwaiti coaches of female athletes. Results showed significant decreases in controlling behaviours among SDT-trained coaches in comparison to a control condition, as assessed by behavioural observations, although both conditions led to increases in need-supportive behaviours. Although the study suffered from some methodological limitations, as discussed in Chapter Four, the findings suggest that coaches of female athletes in Kuwait are receptive to the principles of SDT and are able to incorporate need-supportive behaviours into their coaching practice.

5.2 Theoretical contributions of the thesis

Individuals' goals and beliefs are shaped by the traditions and culture with which they grow up. As a number of authors (Lonner & Adamopoulos, 1997; Markus & Kitayama, 1991) suggest, behavioural models are heavily based on seeing the traditional environment as the foremost influence on beliefs, attitudes and goals. According to Markus and Kitayama (1991) the emphasis of individuals' goals and beliefs in Western cultures is on maintaining independence from others whereas in collectivist cultures the emphasis is on harmonious interdependence with others. Thus these authors have argued that autonomy is a 'Western' need that has little if any relevance to traditional collectivist cultures. However, SDT distinguishes between independence and autonomy (Chirkov & Ryan, 2001). In SDT autonomy is concerned with volition whereas independence involves a non-reliance on others. From this perspective, autonomy and interdependence would not necessarily be in conflict. If an individual volitionally endorses the customs and values of their culture then they can remain autonomous in acting in accordance with them (Chirkov & Ryan, 2001).

In support of this position, a number of studies have found positive consequences of the autonomous endorsement of cultural practices across different cultures. For example, Chirkov, Ryan Kim and Kaplan (2003) carried out a comparative study between Russian, South Korean, Turkish and American students and found that, in support of SDT, there was a positive association between relative autonomy for following cultural practices and individual well-being across all four cultures. Further research by Chirkov, Ryan & Willness (2005), centered on Brazilian

and Canadian students, shared the findings of the earlier study by demonstrating that individual wellbeing increases when people are free to express their cultural preferences.

Similarly, according to SDT the three basic psychological needs of autonomy competence and relatedness are universal and not culturally dependent and the principle that basic need support always has a positive impact on welfare is common to all communities. SDT recognizes that because cultural circumstances have a significant impact on individuals, the means by which these needs are satisfied may vary between cultural contexts, but the satisfaction of basic needs and the link that has with individual wellbeing supersedes the cultural environment. Thus basic psychological needs for relatedness, competence and autonomy are significant across all traditions.

Whilst many studies have supported the universality of the principles of SDT across different cultures, studies two and three of the present thesis are unique in that they are the first to examine SDT's motivational sequence, and the first to apply a SDT-based intervention, in an Arabic context. To the authors' knowledge, only one previous study has adopted the SDT framework for assessing motivation in a Muslim population (Nicaise & Kahan, 2013). However, this study was conducted among Muslims living in the United States, a society that is generally highly supportive of women's engagement in sport, whereas the aim of this thesis was to examine problems associated with women's engagement in Kuwait, where women's sport is largely viewed in a negative light. Thus the thesis adds to the previous cross-cultural studies in other non-Western societies that support the idea of the universality of the principles of SDT.

5.3 Applied contributions of the thesis

Following from the previous discussion of the universal applicability of SDT it is apparent that the theory can be applied to an Arab-Islamic culture. Despite the social and cultural constraints in Kuwaiti female athletics, it appears that coaches can be trained to apply the motivational principles of SDT. Although not tested within this thesis, one would expect, based on the existing SDT literature, that if such

coaches were to consistently engage in need-supportive behaviours and avoid controlling behaviours then their athletes would be more optimally motivated for their engagement in sport. Greater self-determination would in turn lead to greater commitment, which would ultimately lead to improved performance. Thus Kuwaiti female athletes could be positioned to participate in competition at higher levels, should they be given the opportunity. Of course, no matter how good the quality of the coaching they receive is, not every individual athlete will have the ability and talent required to reach elite levels of performance. However, a number of studies in sport contexts have shown that when individuals' basic psychological needs are supported by their coaches they experience greater well-being (e.g., Adie, Duda, & Ntoumanis, 2008, 2012; Reinboth & Duda, 2004, 2006; Reinboth, Duda, & Ntoumanis, 2004). Regardless of the potential impact of need-support on athletic performance then, the promotion of satisfaction of basic psychological needs, a more positive experience in sport and greater well-being are worthwhile outcomes in their own right. Although not specifically addressed in Study One, it is reasonable to assume that the negative cultural climate with regard to women's engagement in sport in Kuwait is at best not conducive to the promotion of well-being. Therefore it can be recommended that coaches in Kuwait should be routinely trained to understand the importance of psychological need satisfaction and autonomous motivation, and to incorporate need-support into their regular coaching practice.

5.4 Limitations

Previous chapters have already discussed specific limitations of each of the studies in the thesis. These include but are not restricted to a reliance on self-report data, as in Study Two, and a reliance on a single observer as in study three. There is a more general limitation in the overall research programme. On starting this PhD the initial goal of the research was to understand the reasons for lack of participation of Kuwaiti women in international sport. The first study was the only one to address this subject. The second study shifted the focus to the study of motivational processes. Whilst these studies provide interesting findings and have added to the research on the cross-cultural relevance of SDT, they do not directly address the original question, nor do they provide solutions to the lack of participation of Kuwaiti

women on the international sporting stage. Indeed, any such solutions are going to require major social, cultural, and political changes. For example, Kuwaiti society is still quite opposed to female sport participation. Their culture has unfavourable connotations about female sport involvement. There is also a lack of gender integration in sport. Often a female athletes' career may end with a marriage, unless her husband gives his consent to the continuation of her training. Study One found many such cultural constraints that prevent Kuwaiti City female athletes from aspiring to compete at an international level. As an individual researcher, I do not have the power to change these constraints. Recognition of this drove the shift in emphasis from Study One to the subsequent studies. Nevertheless, further dissemination of the findings from these subsequent studies in Kuwait could, as noted above, lead to improvements in the sporting experience of women in the country. Thus the work embodied in this thesis has achieved important goals beyond what was initially hoped for.

5.5 Further Research

Thanks to the data from Study One, future research may be able to examine the boundaries within which Kuwaiti women partake in sport. Future studies may also develop ways to better promote the acceptance of female sport in Kuwait and other Muslim countries, perhaps by emphasising the positive social, psychological and emotional benefits of engagement in sport for all sections of society. Much further research could be done to build upon the findings of studies two and three. There is a need to test the SDT motivational sequence longitudinally to determine whether motivation variables of SDT can predict behaviour over time within the Arabic sporting context. Furthermore, there is a need to determine the impact of need-support, need satisfaction and autonomous motivation on other relevant outcomes beyond athletes' training behaviours. These could include well-being related variables, long-term persistence in sport and actual performance. Future studies could also have a powerful impact if they examined which specific types of self-determination (e.g., identified, integrated and intrinsic regulations) are associated with an array of training behaviours, well-being and performance. The limitations of Study Three regarding the use of only one observer and the

subsequent inability to assess the reliability of the observations needs to be addressed. Study Three also needs to be extended to determine the longer term effects of training coaches in need-support on that coaching behaviours, as well as the impact of training on their athletes. It needs to be determined whether training in SDT principles can lead to lasting changes in coaching behaviour. With regard to the impact of coach training on athletes, there is also a need to establish whether training will actually lead to athletes perceiving changes in their coaches behaviour, whether it leads to an adaptive changes in the athletes' motivation and well-being and changes in the athletes' behaviour and sport performance.

5.6 Overall strengths of the thesis and research processes

Beyond the specific strengths of the thesis with regard to its theoretical and applied contributions discussed above, there is a more general strength that lies in the variety of methods adopted to address the research questions. This has resulted in two distinct but related outcomes. First, it allowed me to investigate issues surrounding Arabic women's sport from different methodological perspectives, including qualitative, correlational and experimental designs. This has strengthened the research programme and thesis as a whole, in comparison to a reliance on a more limited methodological approach. At the same time, the employment of a variety of methods has had a significant impact on my own development as a researcher.

The use of qualitative methods in Study One enabled the gathering of rich, in-depth data capturing the personal experiences of athletes as well as key social agents that have an influence on their sporting experience and engagement. Through the use of one-on-one interviews I was able to address potentially delicate cultural issues that individuals may not have wanted to discuss in a group setting. This enabled me to gain a detailed understanding of the participants' personal perspectives on barriers to sport participation and the factors that encourage participation among Arabic Muslim women.

Study Two, in contrast, entailed a quantitative correlational methodology. The use of a structural equation modelling approach enabled the testing of a

complex, multidimensional model and the quantification of both the direct and indirect relationships between the variables of interest. Whilst I already had some experience of qualitative methodologies when I embarked upon this PhD, I had no previous experience of quantitative methods and the use of complex computational statistics. Thus Study Two provided me with the challenge and opportunity to learn a new set of skills and to develop an understanding of quantitative methodological issues including contemporary approaches to significance testing (i.e., bootstrapping), effect size estimation, mediation testing and measurement reliability.

Finally, Study Three was an intervention study, employing an experimental design. Again, this required me to develop further new skills, both in design and data analysis and in the implementation of a theory-based intervention. This extended my quantitative methods skills beyond the use of self-report data and correlational analyses to the evaluation of behaviour change using observational methods. The experience of developing and conducting this study gave me an appreciation of the difficulties of conducting applied research in the real world. Furthermore, the experience gained from this study leaves me well-placed to implement training programmes among coaches and PE teachers that could have a significant impact on women's sport in my native Kuwait.

5.7 Conclusion

The first study assessed here successfully determined the difficulties facing Kuwaiti women who want to participate in international competitions. It contrasted their experiences with those of Egyptian sportswomen, who have had greater involvement in international tournaments. The second study demonstrated the relevance of the self-determination theory to women's sport engagement in an Arabic context and supported the SDT motivational sequence. Finally, the third study showed that an SDT intervention can promote more adaptive interpersonal behaviours among coaches of women athletes in Kuwait. The results of studies Two and Three are encouraging and suggest that further dissemination and application of SDT could have considerable benefits for female athletes in Kuwait. If the circumstances of women's sport in Kuwait could be advanced, their experience of

sport could be improved and, ideally, female Kuwaiti track and field athletes could have improved levels of success, allowing them to eventually take their rightful place on the international stage.

Finally, improving the opportunities for women in Kuwait to engage in sport could have much wider implications for the position of women in Kuwaiti society. If young Kuwaiti women were to see others participating as equals with men in sport and on the world stage it could encourage them to question societal and cultural constraints placed upon them that limit their opportunities in life. Men might also come to see women as more deserving of equal treatment. Thus sport could play a wider role in the empowerment of Muslim girls and women that goes beyond sport engagement itself.

References

- Adie, J., Duda, J., & Ntoumanis, N. (2008). Autonomy support, basic need satisfaction and the optimal functioning of adult male and female sport participants: A test of basic needs theory. *Motivation & Emotion, 32*, 189-199.
- Adie, J., Duda, J., & Ntoumanis, N. (2012). Perceived coach-autonomy support, basic need satisfaction and the well- and ill-being of elite youth soccer players: A longitudinal investigation. *Psychology of Sport and Exercise, 13*, 51-59.
- Ahmed, A., & Donnan, H. (1994). Islam in the Age of Postmodernity. In A. Ahmed and H. Donnan (Eds.), *Islam, globalization and postmodernity* (pp. 1-20). London: Routledge.
- Al Gneem, Y. (1985). *Kathmah in literature and history*. Cairo: Dar Alsalam Bookshop and Publishing House.
- Al Knaae, Y. (1954). *Pages from Kuwait history* (2nd Ed). Damascus: Damascus Printing, Pressing and Publishing House.
- Al Mtwaa, B., & Bedir, S. (1996). *Physical education approaches and teaching methods*. Kuwait: Kuwait Mission for Studies and Specialism Research.
- Al Rsheed, A. (1926). *Kuwait history*. Bagdad: Bagdad Book Publishing.
- Al Shamlan, S. (1959). *Kuwait history*. Cairo: Nahdet Misr Publishing House.
- Al-Haidar, G. (2004). *Struggling for a right: Islam and the participation in sports and physical recreation of girls and women in Kuwait*. (Unpublished doctoral dissertation). Brunel University: London.
- Ali, H., Baynouna, L. & Bernsen, R. (2010). Barriers and facilitators of weight management: perspectives of Arab women at risk for type 2 diabetes. *Health and Social Care in the Community, 18*, 219-28.

- Alsorpony, M. (1996). *The history of Egypt from Muhammad Ali to modern times*. Cairo: Madboly library.
- Alvarez, M., Balaguer, I., Castillo, I., & Duda, J. (2009). Coach autonomy support and quality of sport engagement in young soccer players. *Spanish Journal of Psychology, 12*, 138-148.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261-271.
- Amiot, C., Gaudreau, P., & Blanchard, C. (2004). Self-determination, coping, and goal attainment in sport. *Journal of Sport & Exercise Psychology, 26*, 396–411.
- Amorose, A. (2007). Coaching effectiveness: exploring the relationship between coaching behavior and self-determined motivation. In M. Hagger & N. Chatzisarantis (Eds.), *Self-determination theory in exercise and sport* (pp. 209-227). Champaign, IL: Human Kinetics.
- Amorose, A., & 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*, 654-670.
- Amorose, A., & Horn, T. (2000). Intrinsic motivation: Relationships with collegiate athletes' gender, scholarship status, and perceptions of their coaches' behavior. *Journal of Sport and Exercise Psychology, 22*, 63-84.
- Anderman, L. (1999). Classroom goal orientation, school belonging, and social goals as predictors of students' positive and negative affect following transition to middle school. *Journal of Research and Development in Education, 32*, 89–103.

- Anderman, L., & Anderman, E. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology, 24*(10), 21–37.
- Badran, M. (2002). Islamic feminism: what's in a name? *Al-Ahram Weekly, 569*.
Retrieved from <http://weekly.ahram.org.eg/2002/569/cu1.htm>
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bartholomew, K., Ntoumanis, N., Ryan, R., Bosch, J.A., & Thøgersen-Ntoumani, C. (2011). Self-determination theory and diminished functioning: The role of interpersonal control and psychological need thwarting. *Personality and Social Psychology Bulletin, 37*, 1459-1473.
- Bartholomew, K., Ntoumanis, N., Ryan, R., & Thøgersen-Ntoumani, C. (2011). Psychological need thwarting in the sport context: development and initial validation of a psychometric scale. *Journal of Sport & Exercise Psychology, 33*, 75-102.
- Battistich, V., Solomon, D., Kim, D., Watson, M., & Schaps, E. (1995). Schools as communities, poverty levels of student populations, and students' attitudes, motives, and performance: A multilevel analysis. *American Educational Research Journal, 32*, 627–658.
- Black, A., & Deci, E. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: a self-determination theory perspective. *Science Education, 84*, 740–756.

- Blanchard, C., & Vallerand, R. (1996). *Perceptions of competence, autonomy, and relatedness as psychological mediators of the social factors–contextual motivation relationship*. (Unpublished Doctoral Dissertation). Montreal: University of Quebec.
- Blanchard, C., Amiot, C., Perreault, S., Vallerand, R., & Provencher, P. (2009). Cohesiveness, coach's interpersonal style and psychological needs: Their effects on self determination and athletes' subjective well-being. *Psychology of Sport and Exercise, 10*, 545-551.
- Bloom, B. (1985). *Developing talent in young people*. New York: Ballantine.
- Bo Hakma, A. (1984). *Kuwait modern history*. Kuwait: Alslasel Publishing House.
- Boutilier, M. A. & SanGiovanni, L. (1983). *The sporting woman*. Champaign, IL: Human Kinetics Publishers.
- Boyd, M., & Yin, Z. (1996). Cognitive-affective sources of sport enjoyment in adolescent sport participants. *Adolescence, 31*, 383-395.
- Bradley, H. (1996). *Fractured Identities: Changing patterns of Inequality*. Cambridge: Blackwell, Polity Press.
- Briere, N., Vallerand, R., Blais, M., & Pelletier, L. (1995). Développement et validation d'une mesure de motivation intrinsèque, extrinsèque et d'amotivation en contexte sportif : L'Échelle de Motivation dans les Sports (EMS). [On the development and validation of the French form of the Sport Motivation Scale]. *International Journal of Sport Psychology, 26*, 465-489.
- Brown, D. & Rich, E. (2002). Gender positioning as pedagogical practice in learning to teach PE. In D. Penny (Ed.), *Gender and physical Education: Issues and Directions* (pp. 41-57). London. Routledge.

- Brown, D. (1999). Bodybuilder and social meaning of muscle. *Autobiography*, 7 (1&2): 83-90.
- Brunel, P. (1999). Relationships between achievement goal orientations and perceived motivational climate on intrinsic motivation. *Scandinavian Journal of Medicine and Science in Sports*, 9, 365-374.
- Brustad, R., & Babkes, M. (2004). Social influence on the psychological dimensions of adult physical activity involvement. In M. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp. 313-332). Morgantown, WV: Fitness Information Technology.
- Carnell, B. (2000). *Kuwaiti politician, feminists agree-women's bodies should be hidden*. Retrieved from <http://www.equityfeminism.com/archives/years/2000/000049.htm>
- Carron, A. (1988). *Group dynamics in sport: Theoretical and practical issues*. London: Sports Dynamics.
- Carron, A., Brawley, L., & Widmeyer, W. (1998). The measurement of cohesiveness in sport groups. In J. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 213–226). Morgantown, WV: Fitness Information Technology.
- Charmaz, K. (2001). *Qualitative interviewing and grounded theory analysis: Handbook of interview research*. London: Sage.
- Chatzisarantis, N., & Hagger, M. (2009). Effects of an intervention based on self-determination theory on self-reported leisure-time physical activity participation. *Psychology & Health*, 24, 29-48.

- Chelladurai, P., & Saleh, S. (1978). Preferred leadership in sports. *Canadian Journal of Applied Sport Sciences*, 3, 85-92.
- Chin, W. (1998). The partial least squares approach for structural equation modeling. In G. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Chin, W., & Newsted, P. (1999). Structural equation modeling analysis with small samples using partial least squares. In R. Hoyle (Ed.), *Statistical strategies for small sample research* (pp. 307-341). Thousand Oaks, CA: Sage.
- Chirkov, V., & Ryan, R. (2001). Parent and teacher autonomy-support in Russian and U.S. adolescents: Common effects on well-being and academic motivation. *Journal of Cross-Cultural Psychology*, 32, 618-635
- Chirkov, V., Ryan, R., & Willness, C. (2005). Cultural context and psychological needs in Canada and Brazil: Testing a self-determination approach to the internalization of cultural practices, identity, and well-being. *Journal of Cross-Cultural Psychology*, 36, 423-443.
- Chirkov, V., Ryan, R., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, 84, 97-110.
- Côté, J. (2002). Coach and peer influence on children's development through sport. In J. Silva & D. Stevens (Eds.), *Psychological foundations of sport* (pp. 520-540). Boston, MA: Allyn & Bacon.
- Coffey, A., & Atkinson, P. (1996). *Making sense of Qualitative Data*. Thousand Oaks, CA: Sage.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Hillsdale, N. J.: Lawrence Earlbaum Associates
- Cohen, S., & Syme, S. (1985). Issues in the study and application of social support. In S. Cohen & S. Syme (Eds.), *Social support and health* (pp. 3-22). New York: Academic press.
- Connell, J., & Wellborn, J. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. Sroufe (Eds.), *Self processes in development: Minnesota symposium on child psychology* (pp. 167-216). Chicago: University of Chicago Press.
- Conroy, D., & Coatsworth, J. (2006). Coach training as a strategy for promoting youth social development. *The Sport Psychologist*, 20, 128–144.
- Conroy, D., & Coatsworth, J. (2007). Coaching behaviors associated with changes in fear of failure: changes in self-talk and need satisfaction as potential mechanisms. *Journal of Personality*, 75, 383-419.
- Cooky, C., & McDonald, M. (2005). If You Let Me Play: Young girls 'insider-other' narratives of sport. *Sociology of Sport Journal*, 22, 158-177.
- Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist*, 13, 395–417.
- Côté, J., & Hay, J. (2002). Children's involvement in sport: A developmental perspective. In J. Silva and D. Stevens (Eds.), *Psychological Foundations of Sport* (pp. 484-502). Boston, MA: Allyn and Bacon.
- Creswell, J. (1998). *Qualitative inquiry and research design*. London: Sage.
- Crossley, M. (2000). *Introducing narrative psychology: Self, trauma and the construction of meaning*. Buckingham: Open University Press.

- Csikszentmihalyi, M., Rathunde, K., Whalen, S., & Wong, M. (1993). *Talented teenagers: The roots of success and failure*. New York: Cambridge University Press.
- Deci, E., & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press Publishing Co.
- Deci, E., & Ryan, R. (1985a). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*, 109–134.
- Deci, E., & Ryan, R. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation: Vol. 38. Perspectives on motivation* (pp. 237-288). Lincoln, NE: University of Nebraska Press.
- Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Deci, E., & Ryan, R. (2002). *Handbook of self determination research*. Rochester, NY: University of Rochester Press
- Deci, E., & Ryan, R. (2008). Facilitating optimal motivation and psychological wellbeing across life domains. *Canadian Psychology, 49*, 14-23.
- Deci, E., Eghrari, H., Patrick, B., & Leone, D. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality, 62*, 119–142.
- Delamont, S. (1992). *Fieldwork in educational setting: methods, pitfalls & perspectives*. Lewes: Falmer Press.
- Denzin, N., & Lincoln, Y. (2000). Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (2nd ed.), *Handbook of qualitative research* (pp. 1-29). Thousand Oaks, CA: Sage.

- Diener, R., & Crandall, R. (1978). *Ethics in social and behavioral research*. Chicago: University of Chicago Press.
- Donnelly, P., & Young, K. (1999). Rock climbers and rugby players: Identity Construction and Confirmation. In J. Coakley & P. Donnelly (Eds.), *Inside sports* (pp. 68-77). London: Routledge.
- Duda, J. (2001). Achievement goal research in sport: Pushing the boundaries and clarifying some misunderstandings. In G. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 129-182). Champaign, IL: Human Kinetics.
- Duda, J., & Hall, H. (2000). Achievement goal theory in sport: recent extensions and future directions. In R. Singer, H. Hausenblas, & C. Janelle (Eds.), *Handbook of sport psychology* (pp. 417-443). New York: John Wiley.
- Durand-Bush, N., Salmela, J., & Thompson, K. (2004). Le rôle joué par les parents dans le développement et le maintien de la performance athlétique experte [The role of parents in the development and maintenance of expert athletic performance]. *STAPS*, 64, 15-38.
- Dweck, C. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Eccles, J., & Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for early adolescents. In R. Ames & C. Ames (Eds.), *Research on motivation in education: Goals and cognitions* (pp. 13-44). New York: Academic Press.
- Ericsson, K., Krampe, R., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100, 363-406.

- Erle, F. (1981). *Leadership in competitive and recreational sport*. (Unpublished doctoral dissertation). Ontario: University of Western Ontario.
- Esterberg, K. (2002). *Qualitative methods in social research*. New York: McGraw-Hill.
- Evans, J., Davies, B., & Penney, D. (1996). Teachers, teaching and the social construction of gender relations. *Sport Education and Society, 1*, 165-184.
- Fornell, C., & Bookstein, F. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research, 19*, 440-452.
- Fornell, C., & Larcker, D. (1981). Evaluation of structural equations models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39-50.
- Fortier, M., Hogg, W., O'Sullivan, T., Blanchard, C., Reid, R., Sigal, R., Boulay, P., Doucet, E., Sweet, S., Bisson, E., & Beaulac, J. (2007). The Physical Activity Counseling (PAC) Randomized Controlled Trial: rationale, methods, and interventions. *Applied Physiology, Nutrition & Metabolism, 32*, 1170-1185.
- Frank, F., & Miller, N. (1992). *A primer for soft modeling*. Akron, OH: University of Akron Press.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*, 148-162.
- Gagné, M., Ryan, R., & Bargmann, K. (2003). Autonomy support and need satisfaction in the motivation and wellbeing of gymnasts. *Journal of Applied Sport Psychology, 15*, 372-390.

- Galton, M. (1979). Systematic classroom observation: British research. *Educational Research, 21*(2), 109-115.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: scale development and educational correlates. *Psychol Schools, 30*, 79-90.
- Goodwin, J. (1994). *Price of honour: Muslim women lift the veil of silence on the Islamic world*. London: Warner Books.
- Gould, D., Greenleaf, C., Chung, Y., & Guinan, D. (2002). A survey of U.S. Atlanta and Nagano Olympians: Variables perceived to influence performance. *Research Quarterly for Exercise and Sport, 73*, 175-186.
- Gould, D., Jackson, S., & Finch, L. (1993). Life at the top: The experience of U.S. National champion figure skaters. *The Sport Psychologist, 10*, 341-366.
- Gratton, C., & Jones, I. (2004). *Research methods for sports studies*. London: Routledge.
- Green-Demers, I., Pelletier, L., Stewart, D., & Gushue, N. (1998). Coping with less interesting aspects of training: Toward a model of interest and motivation enhancement in individual sports. *Basic and Applied Social Psychology, 20*, 251-261.
- Greendorfer, S. (1992). Sport socialization. In T. Horn (Ed.), *Advances in sport psychology* (pp. 201-218). Champaign, IL: Human Kinetics.

- Greendorfer, S. (1993). Gender role stereotypes and early childhood socialization. In G. Cohen (Ed.), *Women in sport: Issues and controversies* (pp. 3-14). Newbury Park, CA: Sage.
- Grolnick, W., & Ryan, R. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology, 81*, 143-154.
- Guay, F., Boggiano, A., & Vallerand, R. (2001). Autonomy support, intrinsic motivation, and perceived competence: Conceptual and empirical linkages. *Personality and Social Psychology Bulletin, 27*, 643-650.
- Haerens, L., Aelterman, N., Van den Berghe, L., De Meyer, J., Soenens, B., & Vansteenkiste, M. (2013). Observing physical education teachers' need supportive interactions in classroom settings. *Journal of Sport & Exercise Psychology, 35*, 3-17.
- Hagger, M., Chatzisarantis, N., Barkoukis, V., Wang, C., & Baranowski, J. (2005). Perceived autonomy support in physical education and leisure-time physical activity: A cross-cultural evaluation of the trans-contextual model. *Journal of Educational Psychology, 97*, 287-301.
- Hagger, M., Chatzisarantis, N., Culverhouse, T., & Biddle, S. (2003). The processes by which perceived autonomy support in physical education promotes leisure-time physical activity intentions and behavior: A trans-contextual model. *Journal of Educational Psychology, 95*, 784-795.
- Hall, M. (1996). *Feminism and sporting bodies: Essays on theory and practice*. Champaign, IL: Human Kinetics.

- Hall, M., Slack, T., Smith, G., & Whitson, D. (1991). *Sport in Canadian society*. Toronto: McClelland & Stewart.
- Halliday, F. (1994). The politics of Islamic fundamentalism. In A. Ahmed and H. Donnan (Eds.), *Islam, globalization and postmodernity* (pp. 91–113). London: Routledge.
- Hallway, L. (1997). *Basic concepts for qualitative research*. Oxford: Blackwell.
- Hardin, M., & Shain, S. (2005). Female sports journalists: Are we there yet? 'No.' *Newspaper Research Journal*, 26, 22-35.
- Hargreaves, J. (1994). *Sporting females: critical issues in the history and sociology of women's sport*. London: Routledge.
- Hargreaves, J. (2000). *Heroines of sport: The politics of difference and identity*. London: Routledge.
- Hargreaves, J., & Vertinsky, P. (2007). *Physical culture, power, and the body*. London & New York: Routledge.
- Harris, J. (2002). No you can't play you're a girl': Some primary school recollections of female football players. *The Bulletin of Physical Education*, 38(3), 161-178.
- Harris, J., & Penney, D. (2000). Gender issues in health-related exercise. *European Physical Education Review*, 6, 249-273.
- Harwood, C. (2008). Developmental consulting in a professional football academy: The coaching efficacy program. *The Sport Psychologist*, 22, 109-133.
- Hein, V., Müür, M., & Koka, A. (2004). Intention to be physically active after school graduation and its relationships to three types of intrinsic motivation. *European Physical Education Review*, 10, 5-19.

- Hendry, M., Williams, N., Markland, D., Wilkinson, C., & Maddison, P. (2006). Why should we exercise when our knees hurt? A qualitative study of primary care patients with osteoarthritis of the knee. *Family Practice, 23*, 558-567.
- Hollembek, J., & Amorose, A. (2005). Perceived coaching behaviors and college athletes' intrinsic motivation: A test of self-determination theory. *Journal of Applied Sport Psychology, 17*, 20-36.
- Holt, N., & Dunn, J. (2004). Toward a grounded theory of the psychosocial competencies and environmental conditions associated with soccer success. *Journal of Applied Sport Psychology, 16*, 199-219.
- Horn, T. (2002). Coaching effectiveness: research findings and future directions. In T. Horn (Ed.), *Advances in sport psychology* (pp. 309-354). Champaign, IL: Human Kinetics.
- Houfort, N., Koestner, R., Joussemet, M., Nantel-Vivier, A., & Leves, N. (2002). The impact of performance-contingent rewards on perceived autonomy and competence. *Motivation and Emotion, 26*, 279-295.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal, 20*, 195-204.
- Humbert, L. (1995). *On the sidelines: The experiences of young women in physical education class*. (Unpublished doctoral dissertation). Edmonton: University of Alberta.
- Ingledew, D., & Markland, D. (2008). The role of motives in exercise participation. *Psychology and Health, 23*, 807-828.

Ingledeu, D.K., Markland, D., & Ferguson, E. Three levels of exercise motivation.

Applied Psychology: Health and Wellbeing, 1, 336-355.

Iran Daily (2004). 25 August, Retrieved from <http://www.iran-daily.com/1383/2072/html/politic.htm#3084>

Jacklin, C., & Maccoby, G. (1978). Social behavior at 33 months in same-sex and mixed-sex dyads. *Child Development*, 49, 559-569.

Jõesaar, H., Hein, V., & Hagger, M. (2011). Peer influence on young athletes' need satisfaction, intrinsic motivation and persistence in sport: a 12-month prospective study. *Psychology of Sport and Exercise*, 12, 500-508.

Johan Y., Lonsdale, C., & Hodge, K. (2010). The Basic Needs Satisfaction in Sport Scale (BNSSS): Instrument development and initial validity evidence. *Psychology of Sport and Exercise*, 11, 1-8.

Jolly, K., Duda J., Daley, A., Eves, F., Mutrie, N., Ntoumanis, N., Rouse, P., Lodhia, R., & Williams, G. (2009). Evaluation of a standard provision versus an autonomy promotive exercise referral program: Rationale and study design. *BMC Public Health*, 9, 1-9.

Kane, M., & Greendorfer, S. (1994). The Media's role in accommodating and resisting stereotyped images of woman in sport. In P. Creedon (Ed.), *Women, media and sport: Challenging gender values* (pp. 28-44). London: Sage.

Kanneh, K. (1995). The difficult politics of wigs and veils: feminism and the colonial body. In B. Ashcroft, G. Griffiths and H. Tiffin (Eds.), *The post-colonial studies reader* (pp. 346-348). London: Routledge.

Karam, A. (1998). *Women, Islamism and the state: Contemporary feminism in Egypt*. London: Macmillan.

- Kim, M. (1995). Performance norms and performance by teams in basketball competition. *Perceptual and Motor Skills, 80*, 770-775.
- Kirk, D., Fitzgerald, H., Wang, J. & Biddle, S. (2001). *Towards girl-friendly physical education: The Nike/youth sport trust girls in partnership project, final report*. Loughborough: Institute of Youth Sport.
- Krane, V. (2001). We can be athletic and feminine but do we want to? Challenging hegemonic femininity in women's sport. *Quest, 53*, 115-133.
- Kumar, R. (1996). *Research methodology: A step guide for beginners*. Sage: London.
- Lee, T., Mitchell, T., & Sablynski, C. (1999). Qualitative research in organizational and vocational psychology. *Journal of Vocational Behavior, 55*, 161-187.
- Lindner, K. & Kerr, J. (2001). Predictability of sport participation motivation from metamotivational dominances and orientations. *Personality and Individual Differences, 30*, 759-773.
- Lonner, W., & Adamopoulos, J. (1997). Culture as antecedent to behavior. In J. Berry, Y. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology* (pp. 43-84). Needham Heights, MA: Allyn & Bacon.
- Lonsdale, C., Hodge, K., & Rose, E. (2008). The Behavioral Regulation in Sport Questionnaire (BRSQ): Instrument development and initial validity evidence. *Journal of Sport and Exercise Psychology, 30*, 323-355.
- Mageau, G., & Vallerand, R. (2003). The coach athlete relationship: a motivational model. *Journal of Sports Sciences, 21*, 883-904.
- Mahl, M. (1995). Women on the edge of time. *New Internationalist*, August: 14-16.

- Markland, D., & Tobin, V. (2010). Need support and behavioural regulations for exercise among exercise referral scheme clients: the mediating role of psychological need satisfaction. *Psychology of Sport and Exercise, 11*, 91-99.
- Markland, D., Ryan, R., Tobin, V., & Rollnick, S. (2005). Motivational interviewing and self-determination theory. *Journal of Social and Clinical Psychology, 24*, 811-831.
- Markula, P. (2001). Beyond the body perfect body: women's body image distortion in fitness magazine discourse. *Journal of Sport and Social, 25*, 158-179.
- Markus, H., & Kitayama, S. (1991). Culture and the Self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.
- Markus, H., Kitayama, S., & Heiman, R. (1996). *Culture and "basic" psychological principles*. In E. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 857-913). New York: Guilford Press.
- Matos, M., Sardinha, L., & Teixeira, P. (2010). Helping overweight women become more active: Need support and motivational regulations for different forms of physical activity. *Psychology of Sport and Exercise, 11*, 591-601.
- Maykut, P., & Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide*. London: Routledge.
- McLachlan, S., & Hagger, M. (2010). Effects of an autonomy-supportive intervention on tutor behaviors in a higher education context. *Teaching and Teacher Education, 26*, 1204-1210.
- Mernissi, F. (1991). *The veil and the male elite: A feminist interpretation of women's right in Islam*. New York: Perseus Books.

- Messner, M.A. (1988). Sport and male domination: The female athletes as contested ideological terrain. *Sociology of Sport Journal*, 5, 197-211.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis* (2nd Ed). Sage: Thousand Oaks.
- Miloch, K., Pedersen, P., Smucker, M., & Whisenant, W. (2005). The current state of women print journalists: An analysis of the status and careers of females in newspapers sports departments. *Public Organization Review*, 5, 219-232.
- Moghadam, V. (2002). Islamic feminism and its discontents: toward a resolution of the debate Signs. *Journal of women in Culture and society*, 27, 1,135-70.
- Moghissi, H. (1999). *Feminism and Islamic fundamentalism: The limits of postmodern analysis*. London: Zed Publications.
- Moller, A., Deci, E., & Ryan, R. (2006). Choice and ego-depletion: The moderating role of autonomy. *Personality and Social Psychology Bulletin*, 32, 1024-1036.
- Molotch, H. (1978). The news of woman and the work of men. In G., Tuchman, D., Kaplan, J. Benet (Eds.), *Hearth and home: Images of women in the mass media* (pp. 176-185). New York: Oxford University Press.
- Moreno, J., Gonzalez-Cutre Coll, D., Martin-Albo, J., & Cervello, E. (2010). Motivation and performance in physical education: an experimental test. *Journal of Sports Science & Medicine*, 9, 79e85.
- Mouratidis, A., Vansteenkiste, M., Lens, W., & Sideridis, G. (2008). The motivating role of positive feedback in sport and physical education: evidence for a motivational model. *Journal of Sport & Exercise Psychology*, 30, 240e268.

- Nicaise, V. & Kahan, D. (2013). Psychological changes among Muslim students participating in a faith-based school physical activity program. *Research Quarterly for Exercise and Sport, 84*, 522-529.
- Nicholls, J. (1984). Achievement motivation: Conceptions of ability, subjective, experience, task choice and performance. *Psychological Review, 91*, 328-346.
- Niemiec, C., Lynch, M., Vansteenkiste, M., Bernstein, J., Deci, E., & Ryan, R. (2006). The antecedents and consequences of autonomous self-regulation for college: a self-determination theory perspective on socialization. *Journal of Adolescence, 29*, 761-775.
- Ntoumanis, N. (2001). Empirical links between achievement goal theory and self-determination theory in sport. *Journal of Sport Sciences, 19*, 397-409.
- Ntoumanis, N. (2005). A prospective study of participation in optional school physical education based on self-determination theory. *Journal of Educational Psychology, 97*, 444-453.
- Ntoumanis, N., & Biddle, S. (1999). A review of motivational climate in physical activity. *Journal of Sports Sciences, 17*, 643-665.
- Nugent, P., & Faucette, N. (1995). Marginalized voices: Constructions of and responses to physical education and grading practices by students categorized as gifted or learning disabled. *Journal of Teaching in Physical Education, 14*, 418-430.
- O'Connell, J. (2005). Too hot to handle. *Muscle & Fitness*, August: 218-24.
- Oliver, E. (2010). Advancing the understanding of self-talk: A self-determination theory perspective. (Unpublished Doctoral Dissertation). Bangor: Bangor University.

- Oliver, E., Hardy, J., & Markland, D. (2010). Identifying important practice behaviors for the development of high-level youth athletes: Exploring the perspectives of elite coaches. *Psychology of Sport and Exercise, 11*, 433-443.
- Ommundsen, Y., & Vaglum, P. (1991). Soccer competition anxiety and enjoyment in young boy players: The influence of perceived competence and significant others' emotional involvement. *International Journal of Sport Psychology, 22*, 35-49.
- Paternoster, R., Brame, R., Mazerolle, P. & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology, 36*, 859-866.
- Pederson, P. (2002). Examining equity in newspaper photographs: A content analysis of the print media photographic coverage of interscholastic athletics. *International Review for the Sociology of Sport, 37*, 303-318.
- Pelletier, L., Fortier, M., Vallerand, R., & Briere, N. (2001). Associations among perceived autonomy support, forms of self-regulation, and persistence: A prospective study. *Motivation & Emotion, 25*, 279-306.
- Pelletier, L., Fortier, M., Vallerand, R., Tusson, K., Briere, N., & Blais, M. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and a motivation in sports: The Sport Motivation Scale. *Journal of Sport & Exercise Psychology, 17*, 35-53.
- Petherick, C., & Weigand, D. (2002). The relationship of dispositional goal orientations and perceived motivational climates on indices of motivation in male and female swimmers. *International Journal of Sport Psychology, 33*, 218-237.

- Phillips, M. (1997). *A report on the media coverage and portrayal of women's sport in Australia 1996*. Canberra: Australian Sports Commission
- Plummer, K. (1993). *Document of life*. London: Allen and Unwin.
- Propp, K. (1995). An Experimental examination of biological sex as a status cue in decision-making group and its influence on information use. *Small Group Research, 26*, 451-474.
- Quested, E., & Duda, J. (2009). Perceptions of the motivational climate, need satisfaction, and indices of well- and ill-being among hip hop dancers. *Journal of Dance Medicine & Science, 13*(1), 10-19.
- Raad, Z. (2004). Gulf women sprinters fail to qualify. *Middle East Online*. Retrieved from <http://www.middle-east-online.com/english/?id=11028>
- Rees, T. (2006). Influence of social support on athletes. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 223-231). Champaign, IL: Human Kinetics.
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology, 98*, 209-218.
- Reeve, J., Bolt, E., & Cai, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology, 91*(3), 537-548.
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion, 28*, 147-169.
- Reinboth, M., & Duda, J. (2004). Relationship of the perceived motivational climate and perceptions of ability to psychological and physical well-being in team sports. *The Sport Psychologist, 18*, 237-251.

- Reinboth, M., & Duda, J. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise, 7*, 269-286.
- Reinboth, M., Duda, J., & Ntoumanis, N. (2004). Dimensions of coaching behavior, need satisfaction, and the psychological and physical welfare of young athletes. *Motivation and Emotion, 28*, 297-313.
- Rich, E. (2003). The Problem with girls: Liberal feminism, 'equal opportunities' and the gender inequality in physical education. *The British Journal of teaching Physical Education, (Spring)*, 46-49.
- Ringle, C., Wende, S., & Will, A. (2006). *Smart PLS* (Version 2.0 beta). Germany: University of Hamburg.
- Rintala, J., & Birrell, S., (1984). Fair treatment for the active female: A content analysis of Young Athlete Magazine. *Sociology of Sport Journal, 1*, 231-250.
- Ritchie, J & Lewis, J. (2003). *Qualitative research practice*. London: Sage.
- Roeser, R., Midgley, C., & Urdan, T. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology, 88*, 408-422.
- Rose, E., Parfitt, G., & Williams, S. (2005). Exercise causality orientations, behavioural regulation for exercise and stage of change for exercise: Exploring their relationships. *Psychology of Sport & Exercise, 6*, 399-414.
- Ryan, J. (1996). *Little girls in pretty boxes: The making and breaking of elite gymnasts and figure skaters*. London: The Women's Press.

- Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67.
- Ryan, R., & Deci, E. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In M. Leary & J. Tangney (Eds.), *Handbook on self & identity* (pp. 253-274). New York: The Guilford Press.
- Ryan, R., & Deci, E. (2007). Self-determination theory and the promotion and maintenance of sport, exercise, and health. In M. Hagger & N. Chatzisarantis (Eds.), *Self-determination theory in exercise and sport* (pp. 1-19). Champaign, IL: Human Kinetics.
- Ryan, R., & La Guardia, J. (2000). What is being optimized? Self-determination theory and basic psychological needs. In S. Qualls & N. Abeles (Eds.), *Psychology and the aging revolution: How we adapt to longer life* (pp. 145–172). Washington, DC: American Psychological Association.
- Ryan, R., & Powelson, C. (1991). Autonomy and relatedness as fundamental to motivation and education. *Journal of Experimental Education, 60*, 49–66.
- Ryan, R., Deci, E., & Grolnick, W. (1995). Autonomy, relatedness and the self: Their relation to development and psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Manual of developmental psychopathology*. New York, NY: Wiley.
- Salmela, J. (1995). Learning from the development of expert coaches. *Coaching and Sport Science Journal, 2*, 3-13.
- Salmela, J. (1996). *Great job coach! Getting the edge from proven winners*. Ottawa, ON: Potentium.

- Sarason, I., Sarason, B., & Pierce, G. (1990). Social support, personality, and performance. *Journal of Applied Sport Psychology, 2*, 117-127.
- Sarrazin, P., Tessier, D., Pelletier, L., Trouilloud, D., & Chanal, C. (2006). The effects of teachers' expectations about students' motivation on teacher's autonomy-supportive and controlling behavior. *International Journal of Sport and Exercise Psychology, 4*, 283-301.
- Schensul, S., Schensul, J., & LeCompete, W. (1999). *Essential ethnographic methods. Walnut Creek*. California: Alta Mira Press.
- Scraton, S. (1987). Boys muscle in where angels fear to tread: Girls' Sub-cultures and physical activities. In J. Horne, D. Jary, & A. Tomlinson (Eds.), *Sport, Leisure and Social Relations* (pp. 35-46). London: Rutledge & Kegan Paul.
- Scraton, S. (1988). *Shaping up to womanhood: A study of the relationship between gender and girls' physical education in a city based local education authority*. (Unpublished doctoral dissertation). Open University.
- Selig, J., & Preacher, K. (2008). *Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects* [Computer software]. Retrieved from <http://quantpsy.org/>
- Shaikh, S. (2003). Transforming feminisms: Islam, women, and gender justice. In O. Safi (Ed.), *Progressive Muslims: On justice, gender and pluralism* (pp. 147-162). Oxford: One world Publications.
- Shrout, P., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422-445.

- Silva, M., Markland, D., Vieira, P., Coutinho, S., Carraca, E., Palmeira, A., Minderico, Smith, J., Harre, R., & Langenhove, L. (1995). Introduction. In J. Smith, R. Harre, & L. Langenhove (Eds.), *Rethinking methods in psychology* (pp. 1-29). Thousand Oaks, CA: Sage.
- Smith, R., & Smoll, F. (1997). Coach-mediated team building in youth sports. *Journal of Applied Sport Psychology, 9*, 114-132.
- Smith, R., Smoll, F., & Cumming, S. (2007). Effects of a motivational climate intervention for coaches on young athletes' sport performance anxiety. *Journal of Sport and Exercise Psychology, 29*, 39-59.
- Smoll, F., & Smith, R. (2002). Coaching behavior research and intervention in youth sports. In F. Smoll & R. Smith (Eds.), *Children and youth in sport* (pp. 211-231). Dubuque, IA: Kendall/Hunt.
- Sounthworth, G. (1990). *Staff selecting in the primary schools*. Oxford: Blackwell.
- Sparkes, A. (1997). The reflections on the socially constructed physical self. In K. Fox (Ed.), *The physical self: From motivation to Well Being* (pp. 83-109). Champaign, IL: Human Kinetics Press.
- Standage, M., Duda, J., & Ntoumanis, N. (2003). A model of contextual motivation in physical education: Using constructs from self-determination and achievement goal theories to predict physical activity intentions. *Journal of Educational Psychology, 95*, 97-110.
- Standage, M., Duda, J., & Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *British Journal of Educational Psychology, 75*, 411-433.

- Standage, M., Duda, J., & Ntoumanis, N. (2006). Students' motivational processes and their relationship to teacher ratings in school physical education: a self-determination approach. *Research Quarterly for Exercise and Sport*, 77, 100-110.
- Stewart, A. (1998). *The ethnographer's method*. Thousand Ok, CA: sage.
- Stiles, W. (1993). Quality control in qualitative research. *Clinical Psychology Review*, 13, 593-618.
- Swetnam, D. (2004). *Writing your dissertation*. Oxford: Derek Swetnam
- Taheri, A. (2004). Muslim women play only an incidental part in the Olympics. *Gulf News*. Retrieved from <http://gulfnews.com/news/gulf/uae/general/amir-taheri-muslim-women-play-only-an-incidental-part-in-the-olympics-1.330067>
- Talbot, M. (1988). Women and the Olympic Games. *Action*, 19, 10-12.
- Talbot, M. (1993). A gendered physical education: Equality and sexism. In J. Evans (Eds.), *Equality, education and physical education* (pp. 74-89). London: Falmer.
- Tessier, D., Sarrazin, P., & Ntoumanis, N. (2008). The effects of an experimental program to support students' autonomy on the overt behaviors of physical education teachers. *European Journal of Psychology of Education*, 23, 239-253.
- Tessier, D., Sarrazin, P., & Ntoumanis, N. (2010). The effects of a program intended to support students' needs on the overt behaviors of teachers, and students' self-determined motivation and engagement in physical education. *Contemporary Educational Psychology*, 35, 242-253.
- Vallerand, R. (2001). A hierarchical model of intrinsic and extrinsic motivation in sport and exercise. In G. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 263-319). Champaign, IL: Human Kinetics.

- Vallerand, R., & Losier, G. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology, 11*, 142-169.
- Vallerand, R., Fortier, M., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology, 72*, 1161-1176.
- Vallerand, R., Pelletier, L., Blais, M., Brière, N., Senécal, C., & Vallières, E. (1993). On the assessment of intrinsic, extrinsic, and a motivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. *Educational and Psychological Measurement, 53*, 159–172.
- Van den Berghe, L., Soenens, B., Vansteenkiste, M., Aelterman, N., Cardon, G., Tallir, I., & Haerens, L. (2013). Observed need-supportive and need-thwarting teaching behavior in physical education: Do teachers' motivational orientations matter? *Psychology of Sport and Exercise, 14*, 650- 661.
- Vansteenkiste, M., Ryan, R., & Deci, E. (2008). Self-determination theory and the explanatory role of psychological needs in human well-being. In L. Bruni, F. Comim, & M. Pugno (Eds.), *Capabilities and happiness* (pp. 187-223). Oxford, UK: Oxford University Press.
- Vansteenkiste, M., Simons, J., Soenens, B., & Lens, W. (2004). How to become a persevering exerciser? Providing a clear, future intrinsic goal in an autonomy supportive way. *Journal of Sport & Exercise Psychology, 26*, 232-249.
- Walter, N. & Al-Faisal, R. (2005). Veiled hopes. *The guardian*. Retrieved from <http://www.theguardian.com/world/2005/feb/05/saudiArabia.natashawalter>

- Wang, J., Koh, K. & Chatzisarantis, N (2009). An intra-individual analysis of players' perceived coaching behaviors, psychological needs, and achievement goals. *International Journal of Sports Science & Coaching*, 4, 2-15.
- Wentzel, K. (1999). Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology*, 91, 76-97.
- Wentzel, K., & Wigfield, A. (1998). Academic and social motivational influences on students' academic performance. *Educational Psychology Review*, 10, 155-175.
- White, R. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297-333.
- Wilson, P., & Rodgers, W. (2004). The relationship between perceived autonomy support, exercise regulations and behavioral intentions in women. *Psychology of Sport and Exercise*, 5, 229-242.
- Woodward, K. (2000). *Questioning identity: gender, classes and nation*. London: Routledge.
- Zander, A. (1975). Motivation and performance of sports groups. In D. Landers (Ed.), *Psychology of sport and motor behavior* (pp. 145-159). University Park: Pennsylvania State University Press.
- Zander, A. (1982). *Making groups effective*. San Francisco: Jossey-Bass.

Appendix A

Information Sheet of study one

Information Sheet.

Bangor University

SCHOOL OF SPORT, HEALTH AND EXERCISE SCIENCES

Title of project :

Reasons for the Lack of Participation of Women in International Competitions: The Case of Female Kuwaiti and Egyptian Track and Field Athletes .

You are being invited to take part in a research study. Before you agree to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. If you wish, discuss it with friends and relatives. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part, or not.

Background of the study:

The aim of this study is to try to identify and examine some of the reasons for Kuwaiti and Egyptian women's non-participation at international track and field competitions. My findings may be useful in helping to improve women's positions and in rectifying the situation, to some extent. In addition, they will also improve societal awareness of the importance of female inclusion on the international scene. The qualitative study is based on semi-structured interviews with Kuwaiti and Egyptian female athletes, who are involved in Track & Field events, as well as coaches administrators and parents from Kuwait and Egypt.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are free to withdraw at any time and without giving a reason. You are free not to answer specific items or questions.

What will happen to me if I take part?

Face to face interview will be recorded. The interview session lasted between 60 minutes to 90 minutes.

The possible benefits of taking part:

There might well be benefits for women's positions generally in rectifying the situation, to some extent. In addition, there might help to improve women's sport specially in track and field. There may also be benefits to improve societal awareness of the importance of female inclusion on the international scene.

Confidentiality

All information which is collected about you during the research will be kept strictly confidential. Any information will have your name removed so that you cannot be recognised from it. It will not be possible to identify you in any report or publication of the study.

Who has reviewed the study?

The study has been reviewed by the Ethics Committee of Bangor University's School of Sport, Health and Exercise Sciences (SSHES).

Feedback on Conduct of Research

SSHES is always keen to hear the views of research participants about their experience. If you would like to feedback, please ask your researcher to provide you with a Participant Feedback Form. The completed form should be returned to Dr Andrew Lemmey, Chair, SSHES Ethics Committee, SSHES, Bangor University, Bangor LL57 2PZ. All information will be treated in a strictly confidential manner.

Any Questions?

Please ask us if you have any questions. You should not sign the form consenting to take part in the study if you still have unanswered questions or any doubts.

Name of researcher	Sanabel Bader Khalaf
e-mail address	Miss_blue_jeans@hotmail.com
contact phone numbers	0096599998517- 00447533353514

Appendix B

Interview Guide

INTERVIEW GUIDE

<div style="display: flex; justify-content: space-between;"> PARTICIPANTS CONTENT </div>	Athletes	Coaches	Administrators	Parents
Warm-up Questions	<ol style="list-style-type: none"> 1. How long ago did you decide to be an athlete in your particular sport? And why? 2. Who introduced you to your current sport? And how? 	<ol style="list-style-type: none"> 1. Which event you are trained to athletes in track and field? 2. How long have you work in this area? 3. What type of athletes do you typically coach (gender/level)? 4. What size of group/squad do you usually train with? 5. Why did you choose this area? 	<ol style="list-style-type: none"> 1-What is your job in the club? 2 -How long have you worked in this area? 3. Why did you choose this area? 	<ol style="list-style-type: none"> 1. When did you discover your daughter's talent in track and field? 2. Tell me about academic achievement of your daughter? And how training session will influence that?

<p>Social Dimension Culture&</p>	<p>1. Tell me about your experience of P.E class in school? And how it influenced you, in becoming an athlete?</p> <p>2. How does the society view you as a sports person?</p> <p>3. Tell me about the function of culture on women's sport participations?</p> <p>(Why/ Why not)</p>	<p>1. Does the administration help in assisting training?</p> <p>2. How do you think society view women's sports?</p> <p>3. Tell me about the function of culture on women's sport participations?</p> <p>(Why/ Why not)</p>	<p>1. Describe awareness of female sports participation in your country?</p> <p>2. How do you think society view women's sports?</p> <p>3. Tell me about the function of culture on women's sport participations?</p> <p>(Why/ Why not)</p>	<p>1. What is your attitude towards your daughter's sport?</p> <p>2. What is the attitude of society for your support of women's sport?</p> <p>3. Tell me about the function of culture on women's sport participations?</p> <p>(Why/ Why not)</p>
<p>Social Dimension Culture&</p>	<p>4. What do you think of the unification of males and females in international competitions?</p> <p>5. In future, if you get married how it will affect your sporting life?</p> <p>6 Tell me what you think about the ideal position towards policies in women's sport?</p> <p>7. How does the Government encourage female athletes to participate in sports?</p> <p>8. Which organizations encourage your present situation ? And how does it affect women in sport?</p>	<p>4. What do you think of the unification of male and female in international competitions?</p> <p>5. Tell me what you think about the ideal position towards policies in women's sport?</p> <p>6. How does the Government encourage female athletes to participate in sports?</p> <p>7. Which organizations encourage women's sports ? And how does it affect women in sport?</p> <p>8. What do you think about the importance of the family encouraging the development of the athletes performance?</p>	<p>4. What do you think of the unification of male and female in international competitions?</p> <p>5. Tell me what you think about the ideal position towards policies in women's sport?</p> <p>6. How does the Government encourage female athletes to participate in sports?</p> <p>7. Which organizations encourage women's sports ? And how does it affect women in sport?</p> <p>8. What do you think about the importance of the family encouraging the development of the athletes</p>	<p>4. What do you think of the unification of male and female in international competitions?</p> <p>5. What is the attitude of the whole family for your daughter's sport?</p> <p>(If not please indicate the person with his/her reasons)</p> <p>6. What do you think about the importance of the family encouraging the development of the athletes performance?</p>

<p>Social Dimension Culture&</p>	<p>9. What do you think about the importance of the family encouraging the development of the athletes performance? And how does it affect you in sport?</p>		<p>performance?</p>	
<p>Factor Effecting Technique</p>	<p>1. How does the climate affect the train session on the track? 2. How do facilities make training sessions effective? 3. How does equipment make training sessions effective? 4. What different methods do coaches follow during training? 5. What do you think about coaches experience for training athletes? 6. How do you like your coach to behave during training?</p>	<p>1. How does the climate affect the train session on the track? 2. How do facilities make training sessions effective? 3. How does equipment make training sessions effective? 4. What different attitudes do athletes show during training? 5. Where do you see your athletes in the international competitions? Why? 6. What is the important of refresher programmes for you? (E. g., further education or training in any specific elements of your role).</p>	<p>1. How does the climate affect the train session on the track? 2. How do facilities make training sessions effective? 3. How does equipment make training sessions effective? 4. What different attitudes do athletes show during training? 5. Where do you see your athletes in the international competitions? Why? 6. How do you see coaches experience in train?</p>	<p>1. Where do you see your daughter in the international competitions? 2. Do you want this happen? Why / Why not)(</p>

Factor Effecting Technique	7. "Feedback from coach". How this important to your performance?	7. How do you run effective training sessions?	7. What is the importance of refresher programmes for coaches? (E. g., further education or training in any specific elements of coaches role).	
The aim of the study	What is your interpretation of non-participation of female in international competitions in track and field?			
Ending Questions	<ul style="list-style-type: none"> -Where will you be in sport in 2-5 years? And why? -How you will achieve that? -What does the future hold for women's sport? 	<ul style="list-style-type: none"> -What does the future hold for women's sport? 	<ul style="list-style-type: none"> - What does the future hold for women's sport? 	<ul style="list-style-type: none"> - What does the future hold for women's sport? -What is your advice to parents who have daughter's in sport? -What is your advice to parents who forbid women's sport?

Appendix C

Information Sheet of study two.

Information Sheet.

Bangor University

SCHOOL OF SPORT, HEALTH AND EXERCISE SCIENCES (SSHES)

Title of project:

The social context as a determinant of motivation among female Egyptian track and field athletes.

You are being invited to take part in a research study. Before you agree to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. If you wish, discuss it with friends and relatives. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part, or not.

Background of the study:

The purpose of this study is to examine determinants of motivation among female Egyptian track & field athletes. The findings may be useful in examining how motivation contributes to athletes' success in performance.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are free to withdraw at any time and without giving a reason. You are free not to answer specific items or questions.

What will happen to me if I take part?

You will be asked to complete a questionnaire with regard to your feelings and experiences in your major sport. This will take 20-30 minutes.

The possible benefits of taking part:

The findings may be useful in examining how motivation contributes to athletes' success in performance, it would further try to identify some of the motivational techniques which can be tailored to suite the needs of female athletes.

Confidentiality

All information which is collected about you during the research will be kept strictly confidential. Any information will have your name removed so that you cannot be recognised from it. It will not be possible to identify you in any report or publication of the study.

Who has reviewed the study?

The study has been reviewed by the Ethics Committee of Bangor University's School of Sport, Health and Exercise Sciences (SSHES).

Feedback on Conduct of Research

SSHES is always keen to hear the views of research participants about their experience. If you would like to feedback, please ask your researcher to provide you with a Participant Feedback Form. The completed form should be returned to Dr Andrew Lemmey, Chair, SSHES Ethics Committee, SSHES, Bangor University, Bangor LL57 2PZ. All information will be treated in a strictly confidential manner.

Any Questions?

Please ask us if you have any questions. You should not sign the form consenting to take part in the study if you still have unanswered questions or any doubts.

Name of researcher	Sanabel Bader Khalaf
e-mail address	Miss_blue_jeans@hotmail.com
contact phone numbers	0096599998517- 00447533353514

Appendix D

Perceptions of parental need support

The English Version

Sport Support Questionnaire

This questionnaire aims to find out how you view your relationships in your family environment. Using the scale below, please indicate to what extent you disagree or agree with each of the following statements. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel. Your responses will be held in confidence and only used for our research purposes.

To answer, please CIRCLE the appropriate number beside each statement

	Strongly disagree		Neutral		Strongly agree
My parents					
1 My parents whenever possible, allow me to choose what to do	1	2	3	4	5 6 7
2 My parents convey confidence in my abilities	1	2	3	4	5 6 7
3 I feel understood by my parents	1	2	3	4	5 6 7
4 My parents insist upon my doing things their way	1	2	3	4	5 6 7
5 My parents make me feel competent in my work	1	2	3	4	5 6 7
6 My parents aren't very sensitive to my needs and feelings	1	2	3	4	5 6 7
7 My parents try to tell me how to live my life	1	2	3	4	5 6 7
8 My parents constantly blame me for my mistakes	1	2	3	4	5 6 7
9 My parents put time and energy into helping me	1	2	3	4	5 6 7
10 I can be myself with my parents	1	2	3	4	5 6 7
11 My parents answer my questions fully and carefully	1	2	3	4	5 6 7
12 My parents care about me	1	2	3	4	5 6 7
13 My parents allow me to decide things for myself	1	2	3	4	5 6 7
14 My parents never listen to how I would like to improve things	1	2	3	4	5 6 7
15 My parents are not very involved with my concerns	1	2	3	4	5 6 7

Thank you for taking part in our research

Appendix E

Perceptions of coach need support

The English Version

Sport Support Questionnaire

This questionnaire aims to find out how you view your relationships in your training environment. Using the scale below, please indicate to what extent you disagree or agree with each of the following statements. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel. Your responses will be held in confidence and only used for our research purposes.

To answer, please CIRCLE the appropriate number beside each statement

	Strongly disagree		Neutral		Strongly agree
My coach (s)					
1 Take into account my individual needs	1	2	3	4	5 6 7
2 Give me good advice	1	2	3	4	5 6 7
3 Make time for me even though they are busy	1	2	3	4	5 6 7
4 Make me feel free to make decisions	1	2	3	4	5 6 7
5 Make clear to me what I need to do to get results	1	2	3	4	5 6 7
6 Make me feel like I matter to them	1	2	3	4	5 6 7
7 Provide a range of training activities	1	2	3	4	5 6 7
8 Make clear what to expect from engaging in the sessions	1	2	3	4	5 6 7
9 Are concerned about my welfare	1	2	3	4	5 6 7
10 Provide me with choices and options	1	2	3	4	5 6 7
11 Give me training activities that are suited to my level	1	2	3	4	5 6 7
12 Look after me well	1	2	3	4	5 6 7
13 Encourage me to take my own initiative	1	2	3	4	5 6 7
14 Help me to feel confident about training	1	2	3	4	5 6 7
15 Care about me	1	2	3	4	5 6 7

Thank you for taking part in our research

Appendix F

Perceptions of fellow athletes need support

The English Version

Sport Support Questionnaire

This questionnaire aims to find out how you view your relationships in your training environment. Using the scale below, please indicate to what extent you disagree or agree with each of the following statements. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel. Your responses will be held in confidence and only used for our research purposes.

To answer, please CIRCLE the appropriate number beside each statement

	Strongly disagree	Neutral	Strongly agree
My fellow athletes			
1 Are concerned about my individual needs	1	2	7
2 Often give me good advice	1	2	7
3 Make time to help me even though when are busy	1	2	7
4 Help me to make decisions that are good for me	1	2	7
5 Help me to get results	1	2	7
6 Make me feel like I matter to them	1	2	7
7 Support my decisions	1	2	7
8 Help me understand what I need to do in training	1	2	7
9 Are concerned about my welfare	1	2	7
10 Help me make choices	1	2	7
11 Help me to train at the right level	1	2	7
12 Look after me well	1	2	7
13 Encourage me to take my own initiative	1	2	7
14 Help me to feel confident about training	1	2	7
15 Care about me	1	2	7

Thank you for taking part in our research

Appendix G

The Basic Needs Satisfaction in Sport Scale.

The English Version

Feelings About Sport Questionnaire

This questionnaire aims to find out how you feel about your involvement in sport. Using the scale below, please indicate to what extent you disagree or agree with each of the following statements. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel. Your responses will be held in confidence and only used for our research purposes.

To answer, please **CIRCLE** the appropriate number beside each statement

	Strongly disagree				Neutral			Strongly agree
	1	2	3	4	5	6	7	
1 I can overcome challenges in my sport	1	2	3	4	5	6	7	
2 In my sport, I get opportunities to make choices	1	2	3	4	5	6	7	
3 In my sport, I feel I am pursuing goals that are my own	1	2	3	4	5	6	7	
4 I feel I participate in my sport willingly	1	2	3	4	5	6	7	
5 In my sport, I feel close to other people	1	2	3	4	5	6	7	
6 I am skilled at my sport	1	2	3	4	5	6	7	
7 In my sport, I have a say in how things are done	1	2	3	4	5	6	7	
8 In my sport, I really have a sense of wanting to be there	1	2	3	4	5	6	7	
9 In my sport, I feel that I am being forced to do things that I don't want to do	1	2	3	4	5	6	7	
10 I show concern for others in my sport	1	2	3	4	5	6	7	
11 I feel I am good at my sport	1	2	3	4	5	6	7	
12 In my sport, I can take part in the decision-making process	1	2	3	4	5	6	7	
13 In my sport, I feel I am doing what I want to be doing	1	2	3	4	5	6	7	
14 I choose to participate in my sport according to my own free will	1	2	3	4	5	6	7	
15 There are people in my sport who care about me	1	2	3	4	5	6	7	

16	I get opportunities to feel that I am good at my sport	1	2	3	4	5	6	7
17	In my sport, I get opportunities to make decisions	1	2	3	4	5	6	7
18	In my sport, there are people who I can trust	1	2	3	4	5	6	7
19	I have the ability to perform well in my sport	1	2	3	4	5	6	7
20	I have close relationships with people in my sport	1	2	3	4	5	6	7

Thank you for taking part in our research

Appendix H

Behavioural Regulation in Sport Questionnaire (BRSQ).

The English Version

Reason for doing sport Questionnaire

This questionnaire aims to find out how you view your sport motivation. Using the scale below, please indicate to what extent you disagree or agree with each of the following statements. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel. Your responses will be held in confidence and only used for our research purposes.

To answer, please **CIRCLE** the appropriate number beside each statement

I participate in sport:

		Strongly disagree			Neutral			Strongly agree
1	Because people push me to play	1	2	3	4	5	6	7
2	Because I would feel guilty if I quit	1	2	3	4	5	6	7
3	Because the benefits of sport are important to me	1	2	3	4	5	6	7
4	Because it's an opportunity to just be who I am	1	2	3	4	5	6	7
5	Because I enjoy it	1	2	3	4	5	6	7
6	To satisfy people who want me to play	1	2	3	4	5	6	7
7	Because I would feel ashamed if I quit	1	2	3	4	5	6	7
8	Because I value the benefits of my sport	1	2	3	4	5	6	7
9	Because it's a part of who I am	1	2	3	4	5	6	7
10	Because I like it	1	2	3	4	5	6	7
11	Because I feel pressure from other people to play	1	2	3	4	5	6	7
12	Because I feel obligated to continue	1	2	3	4	5	6	7
13	Because it teaches me self-discipline	1	2	3	4	5	6	7

14	Because what I do in sport is an expression of who I am	1	2	3	4	5	6	7
15	Because it's fun	1	2	3	4	5	6	7
16	Because if I don't other people will not be pleased with me	1	2	3	4	5	6	7
17	Because I would feel like a failure if I quit	1	2	3	4	5	6	7
18	Because it's a good way to learn things which could be useful to me in my life	1	2	3	4	5	6	7
19	Because it allows me to live in a way that is true to my values	1	2	3	4	5	6	7
20	Because I find it pleasurable	1	2	3	4	5	6	7

Thank you for taking part in our research

Appendix I

Trait Training Attitudes and Behaviours Questionnaire (TTABQ).

The English Version

Training Behaviours Questionnaire

This questionnaire aims to find out how you approach your training behaviours. Using the scale below, please indicate to what extent you disagree or agree with each of the following statements. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel. Your responses will be held in confidence and only used for our research purposes.

To answer, please CIRCLE the appropriate number beside each statement

	Strongly disagree				Neutral			strongly agree
1 I always turn up with the correct kit for training.	1	2	3	4	5	6	7	
2 I am totally committed to achieving my goals	1	2	3	4	5	6	7	
3 I can cope well with setbacks	1	2	3	4	5	6	7	
4 I complete any additional workouts I am set.	1	2	3	4	5	6	7	
5 I turn up for training with plenty of time to get ready	1	2	3	4	5	6	7	
6 I have a high regard for my coach	1	2	3	4	5	6	7	
7 I am highly motivated to succeed.	1	2	3	4	5	6	7	
8 If I perform poorly I work hard to put things right	1	2	3	4	5	6	7	
9 I check if I am doing as well as I should be.	1	2	3	4	5	6	7	
10 I do extra training in my own time if needed	1	2	3	4	5	6	7	
11 I never miss a training session	1	2	3	4	5	6	7	
12 I respect my team-mates.	1	2	3	4	5	6	7	
13 If things don't go my way I try harder.	1	2	3	4	5	6	7	
14 I am always willing to do extra workouts	1	2	3	4	5	6	7	
15 I am always on time for training.	1	2	3	4	5	6	7	

	Strongly agree		Neutral			strongly disagree	
	1	2	3	4	5	6	7
16 I am honest with coaching staff.	1	2	3	4	5	6	7
17 I am driven to succeed	1	2	3	4	5	6	7
18 I assess my performance during every session	1	2	3	4	5	6	7
19 I always try my hardest during training.	1	2	3	4	5	6	7
20 I am professional in my approach to training.	1	2	3	4	5	6	7
21 I am very competitive	1	2	3	4	5	6	7
22 I put in 100% effort all the time	1	2	3	4	5	6	7
23 Sometimes I ease off if I am not being watched	1	2	3	4	5	6	7
24 I show respect for my coach.	1	2	3	4	5	6	7
25 I am focused on succeeding in my sport	1	2	3	4	5	6	7
26 When I am given negative feedback I use it to improve.	1	2	3	4	5	6	7
27 I put as much effort into training as possible	1	2	3	4	5	6	7
28 I am mentally strong.	1	2	3	4	5	6	7
29 I am lazy during training.	1	2	3	4	5	6	7
30 I ask the coach for feedback on how I am doing	1	2	3	4	5	6	7
31 I always carry out drills and exercises as well as I can	2	3	4	5	6	7	
32 I find it difficult to maintain concentration throughout a training session.	1	2	3	4	5	6	7

	Strongly agree		Neutral			strongly disagree	
33 I find it hard to concentrate when something is explained during training	1	2	3	4	5	6	7
34 I am easily distracted by others during a training session	1	2	3	4	5	6	7
35 I let my concentration levels drop if I am performing something I know well in training (e.g., a drill)	1	2	3	4	5	6	7
36 I tend to concentrate less during training sessions than during games	1	2	3	4	5	6	7

Thank you for taking part in our research

Appendix J

Perceptions of parental need support

The Arabic Version

استبانة الدعم للرياضة

يهدف هذا الاستبيان لمعرفة نظرتك اتجاه علاقاتك في بيئته العائله الخاصه بك. باستخدام المقياس ادناه , يرجى الاشاره الى اي مدى توافق أو لا توافق على كل من العبارات التاليه. لايوجد اي اجابات صحيحة او خاطئه ولا اسئله مخادعه. نريد ببساطه ان نعرف على شعورك الشخصي. اجابنتك ستستخدم لاغراض البحث.

للاجابه , يرجى وضع دائره حول الرقم المناسب بجانب كل جمله.

والدي

او افق	أوافق بشده	لا اوافق بشده					
7	6	5	4	3	2	1	1- والدي اذا امكن, يسمحوا لي في اختيار ما اقوم به
7	6	5	4	3	2	1	2- والدي يضع الثقة بقدراتي
7	6	5	4	3	2	1	3- اشعر بانني أفهم والدي
7	6	5	4	3	2	1	4- والدي يصرون على القيام باموري بطريقتهم
7	6	5	4	3	2	1	5- والدي يجعلوني اشعر بعلمي
7	6	5	4	3	2	1	6- والدي لا يدركون احتياجاتي ومشاعري
7	6	5	4	3	2	1	7- والدي يحاولون بان يقررو كيف ان اعيش حياتي
7	6	5	4	3	2	1	8- والدي دائما يلوموني على اخطائي
7	6	5	4	3	2	1	9- والدي يشغلون وقتهم وطاقتهم في مساعدتي
7	6	5	4	3	2	1	10- يمكنني ان اشعر بذاتي مع والدي
7	6	5	4	3	2	1	11- والدي يجيبون على اسألتني بشكل كامل وباهتمام
7	6	5	4	3	2	1	12- والدي يهتمون بي بشكل جيد
7	6	5	4	3	2	1	13- والدي يسمحون لي بان اقرر أشياء بنفسني
7	6	5	4	3	2	1	14- وادي لا يقتنعون بانني أود احسن الامور
7	6	5	4	3	2	1	15- والدي لا يشاركونني مخاوفي بشكل جيد

شكرا لك على المشاركة في البحث

Appendix K

Perceptions of coach need support

The Arabic Version

استبانة الدعم للرياضة

يهدف هذا الاستبيان لمعرفة نظرتك اتجاه علاقاتك في بيئة التدريب الخاصة بك. باستخدام المقياس ادناه , يرجى الاشارة الى اي مدى توافق أو لا توافق على كل من العبارات التالية. لا يوجد اي اجابات صحيحة او خاطئة ولا اسئلة مخدعه. نريد ببساطه ان نتعرف على شعورك الشخصي. اجابتك ستستخدم لاغراض البحث.

للاجابه , يرجى وضع دائره حول الرقم المناسب بجانب كل جملة.

مدربي (مدربيني)

لا اوافق بشده	أوافق بشده	اوافق	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	
1	2	3	4
5	6	7	

شكرا لك على المشاركة في البحث

Appendix L

Perceptions of fellow athletes need support

The Arabic Version

استبانة الدعم للرياضة

يهدف هذا الاستبيان لمعرفة نظرتك اتجاه علاقاتك في بيئة التدريب الخاصة بك. باستخدام المقياس ادناه , يرجى الاشارة الى اي مدى توافق أو لا توافق على كل من العبارات التالية. لا يوجد اي اجابات صحيحة او خاطئة ولا اسئله مخدعه. نريد ببساطه ان نتعرف على شعورك الشخصي. اجابتك ستستخدم لاغراض البحث.

للجابه , يرجى وضع دائره حول الرقم المناسب بجانب كل جملة.

قرنائي اللاعبين

او افق	أوافق بشده	لا اوافق بشده	
7	6	5	4 3 2 1
			1- يأخذ بالاعتبار احتياجاتي الفرديه
7	6	5	4 3 2 1
			2- عادة ينصحتني نصائح جيده
7	6	5	4 3 2 1
			3- يمنح لي وقت على الرغم من أنهم مشغولون
7	6	5	4 3 2 1
			4- يساعدني على اتخاذ القرارات المناسبه لي
7	6	5	4 3 2 1
			5- يساعدني للحصول على النتائج
7	6	5	4 3 2 1
			6- يجعلني اشعر باهميتي بالنسبه لهم
7	6	5	4 3 2 1
			7- يؤيد قراراتي
7	6	5	4 3 2 1
			8- يساعدني على فهم ما يجب أن افعله في التدريب
7	6	5	4 3 2 1
			9- يهتم بصحتي العامه
7	6	5	4 3 2 1
			10- يساعدني على صنع الخيارات
7	6	5	4 3 2 1
			11- يساعدني في التدريب على المستوى الصحيح
7	6	5	4 3 2 1
			12- يهتم بي بشكل جيد
7	6	5	4 3 2 1
			13- يشجعني على المبادره
7	6	5	4 3 2 1
			14- يساعدني على الشعور بالثقه بالنفس خلال التدريب
7	6	5	4 3 2 1
			15- يرعاني

شكرا لك على المشاركة في البحث

Appendix M

The Basic Needs Satisfaction in Sport Scale.

The Arabic Version

7	6	5	4	3	2	1	18- في رياضتي هناك اشخاص اثق بهم
7	6	5	4	3	2	1	19- لدي القدره على الاداء الجيد في رياضتي
7	6	5	4	3	2	1	20- لدي علاقات وثيقه مع الناس في رياضتي

Appendix N

Behavioural Regulation in Sport Questionnaire (BRSQ).

The Arabic Version

استبانة السبب في ممارسة الرياضة

يهدف هذا الاستبيان لمعرفة نظرتك اتجاه الدافع الى ممارسة الرياضة. باستخدام المقياس ادناه , يرجى الاشارة الى اي مدى توافق أو لا توافق على كل من العبارات التالية. لا يوجد اي اجابات صحيحة او خاطئة ولا اسئلة مخادعة. نريد ببساطة ان نتعرف على شعورك الشخصي. اجابتك ستستخدم لاغراض البحث.

للاجابه , يرجى وضع دائره حول الرقم المناسب بجانب كل جملة.

أشارك في مجال الرياضة ...

اوافق	أوافق بشده	لا اوافق بشده					
7	6	5	4	3	2	1	1- لان الناس دفعنتي لان امارسها
7	6	5	4	3	2	1	2- لانني اشعر بالذنب اذا تركتها
7	6	5	4	3	2	1	3- لأن فوائد ممارسة الرياضة مهمه بالنسبه لي
7	6	5	4	3	2	1	4- لأنها فرصه لاثبات الذات
7	6	5	4	3	2	1	5- لانني استمتع بها
7	6	5	4	3	2	1	6- لارضاء الناس الذين يريدوني ان امارسها
7	6	5	4	3	2	1	7- لانني ساشعر بالخجل اذا تركتها
7	6	5	4	3	2	1	8- لأنني اقيم فوئد ممارستها
7	6	5	4	3	2	1	9- لانها جزء مني
7	6	5	4	3	2	1	10- لانني احبها
7	6	5	4	3	2	1	11- لانني اشعر بالضغط من أشخاص اخرين لكي امارسها
7	6	5	4	3	2	1	12- لانني أشعر بأنني مظطر لمواصلتها
7	6	5	4	3	2	1	13- لأنها تعلمني الانضباط الذاتي
7	6	5	4	3	2	1	14- لاننيما اقوم به في الري اضه ماهو الا تعبير عن نفسي

7	6	5	4	3	2	1	15- لأنها ممتعته
7	6	5	4	3	2	1	16- لاني اذا لم أمارسها لن ارضي اشخاص اخرون
7	6	5	4	3	2	1	17- لانني ساشعر بالفشل اذا تركتها
7	6	5	4	3	2	1	18- لانها وسيله جیده لمعرفة أشياء يمكن أن تفيدني بحياتي
7	6	5	4	3	2	1	19- لانها تسمح لي بالعيش بطريقة صحيحة تناسب قيمي
7	6	5	4	3	2	1	20- لانني وجدت فيها المتعه

شكرا لك على المشاركة في البحث

Appendix O:

Trait Training Attitudes and Behaviours Questionnaire (TTABQ).

The Arabic Version

- 1- إذا لم تجري الامور كما اريد ابذل قصارى جهدي
- 1- أكون دائما مستعدة للقيام بتدريبات اضافيه
- 15- اتواجد دائما في الوقت المحدد للتدريب
- 16- أنني صريحه مع المدربين
- 17- أنني متطلعه للنجاح
- 18- أقيم أدائي أثناء التدريب
- 19- أحاول دائما بذل قصارى جهدي أثناء التدريب
- 20- أتبع طريقه احترافيه في التدريب
- 21- لأدي روح التنافس عاليه
- 22- أنا ابذل قصارى جهدي بنسبه 100% طوال الوقت
- 23- أحيانا اتهاون بالتدريب عندما لا اكون مراقب
- 24- انني اظهر احترامي لمدربي
- 25- أركز في أن انجح في رياضتي
- 26- عندما أتلقى تدريبات سلبيه فأنني استخدمها لتطوير نفسي
- 27- إذا أمكن أبذل المزيد من الجهد في التدريب
- 28- لدي قوه عقليه
- 29- أنني كسوله أثناء التدريب
- 30- أطلب من المدرب بان يقيم أدائي
- 31- دائما أقوم بتدريباتي البدنيه والتمارين بقدر امكاني
- 32- أجد صعوبه في المحافظه على التركيز طوال التدريب
- 33- أجد صعوبه في التركيز عندما يشرح لي شي ما أثناء التدريب
- 34- من السهل أن يتشتت انتباهي من الاخرين ناء التدريب
- 35- يقل مستوى التركيز عند قيامي بتمرين اتقنه جيدا
(مثال: التدريب البدني)
- 36- عادة يقل التركيز خلال التدريبات بشكل اكبر خلال المنافسات

شكرا لك على المشاركة في البحث

Appendix P

Information Sheet of study three.

Information Sheet.

Bangor University

SCHOOL OF SPORT, HEALTH AND EXERCISE SCIENCES (SSHES)

Title of project: An exploration of coaching behaviours.

You are being invited to take part in a research study. Before you agree to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. If you wish, discuss it with friends and relatives. Please ask if there is anything that is not clear or if you would like more information. It is your decision as to whether you wish to take part, or not.

Background of the study:

The purpose of this study is to examine the behaviours coaches engage in to support their athletes.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are free to withdraw at any time and without giving a reason. You are free not to answer specific items or questions.

What will happen to me if I take part?

You will be asked to attend two discussion sessions on effective coaching, each of 30 minutes duration. You will also be observed for two coaching sessions to provide us with information on the behaviours coaches engage in.

The possible benefits of taking part:

The findings will enable us to identify coaching behaviours and techniques which can be tailored to facilitating athletes' motivation.

Confidentiality

All information which is collected about you during the research will be kept strictly confidential. Any information will have your name removed so that you cannot be identified from it. It will not be possible to identify you in any report or publication of the study.

Who has reviewed the study?

The study has been reviewed by the Ethics Committee of Bangor University's School of Sport, Health and Exercise Sciences (SSHES).

Feedback on Conduct of Research

SSHES is keen to hear the views of research participants about their experience. If you would like to feedback, please ask your researcher to provide you with a Participant Feedback Form. The completed form should be returned to Prof Andrew Lemmey, Chair, SSHES Ethics Committee, SSHES, Bangor University, Bangor LL57 2PZ. All information will be treated in a strictly confidential manner.

Any Questions?

Please ask us if you have any questions. You should not sign the form consenting to take part in the study if you still have unanswered questions or any doubts.


Name of researcher	Sanabel Bader Khalaf
e-mail address	Miss_blue_jeans@hotmail.com
contact phone numbers	0096599998517- 00447733353514

Appendix Q

SDT Group Training sessions


The English Version


Experimental 1

 **Session One**

An exploration of coaching behaviours.

Name of PhD student: Sanabel Al-Khalaf
 Supervisor: Dr David Markland
 Supervisory Committee members: Dr Jeanette Thom (Chair)



Self-Determination Theory 

Edward Deci & Richard Ryan,
 University of Rochester, New York

↓

A new model of motivation

↓

Intrinsic motivation (IM) and extrinsic motivation (EM) are important concepts for understanding motivational processes in sport settings (Deci & Ryan, 2002; Valerand & Rousseau, 2001)

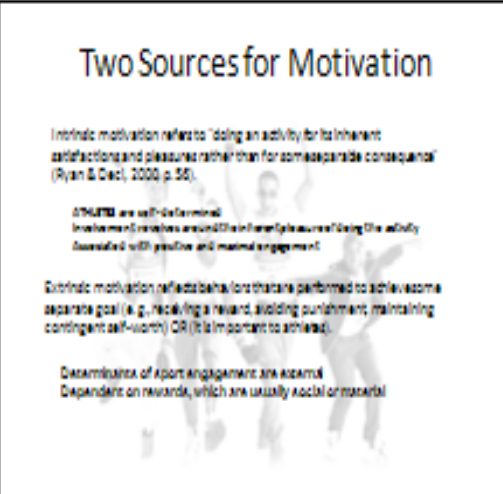
Two Sources for Motivation

Intrinsic motivation refers to "doing an activity for its inherent satisfactions and pleasures rather than for some separable consequence" (Ryan & Deci, 2000 p. 55).

ATHLETES are self-determined
 Involvement revolves around the inherent pleasure of doing the activity associated with positive and maximal engagement.


Extrinsic motivation refers to behaviors that are performed to achieve some separate goal (e.g., receiving a reward, avoiding punishment, maintaining contingent self-worth) OR (it is important to athletes).


Determinants of sports engagement are external
 Dependent on rewards, which are usually social or material



Need Support

 **Autonomy**
 • Coaches make athletes feel free to make decisions, providing choice and options.

 **Structure**
 • Coaches providing , activities , positive feedback, advice and expectations regarding progress in training season

 **Involvements**
 • Coach make athletes feel that he care about them, look after them and concerned about their welfare.

Self-Determination Theory

3 Psychological needs that affect INTRINSIC MOTIVATION:

COMPETENCE – athletes need to feel that they can succeed
Improved when coaches provide positive feedback on athletes training progress and challenging tasks

AUTONOMY – athletes need to feel able to freely choose and want to do.
Improved by giving ATHLETES freedom to make choice and decision

RELATEDNESS – athletes need to care for others and be cared for in return
Improved when athletes feel that their coaches care about them and concerned their welfare.

Importance of SELF-REGULATION


How deeply do you relate to the task you have to do?

Stages going from completely extrinsic to completely intrinsic

CONTROLLED REGULATION

AUTONOMOUS REGULATION

INTRINSIC MOTIVATION



Self-Regulation


CONTROLLED REGULATION
Athletes have an *external* reason they must learn being paid to and no other reason.
"I want to go to training because people push me to play"

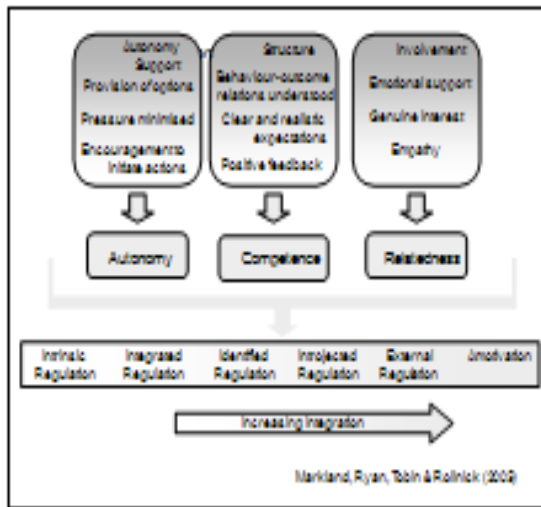
AUTONOMOUS REGULATION
The task is generally important to athletes.
"I want to go to training because I value the benefits of my sport"

INTRINSIC MOTIVATION
This is completely intrinsic motivation with pleasure and no thought of reward or obligation.
"I just love my sport and wish I could be doing it all the time"

Three dimensions of a motivationally supportive environment that correspond to the three psychological needs

Autonomy Support	Structure	Involvement
↓	↓	↓
Autonomy	Competence	Relatedness



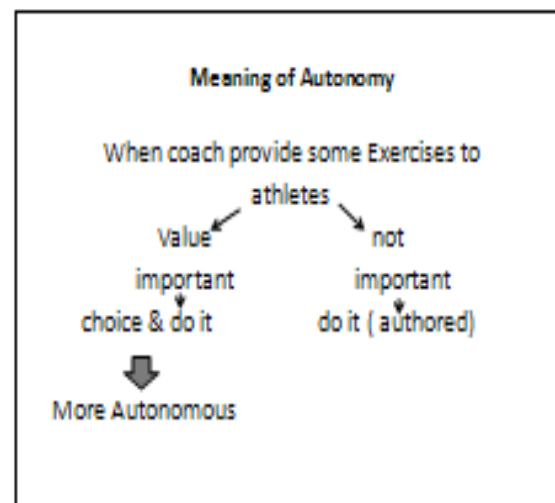
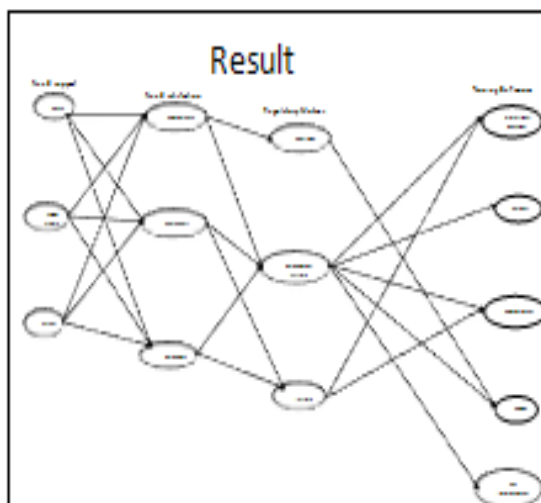


The social context as a determinant of motivation among female Egyptian track and field athletes

Objectives:
 To investigate determinants among female Egyptian track and field athletes.

Method:
 310 female Egyptian track and field athletes (mean age = ...)

Measurement: questionnaire, reliability 0.91.



Conditions of Autonomy-supportive behaviours

- . Provide choice with specific rules and limits.
- . Provide a rationale for tasks and limits.
- . Acknowledge the other person's feelings and perspective.
- . Provide athletes with opportunities for initiative taking and independent work.
- . Provide non-controlling competence feedback.
- . Avoid controlling behaviours:
 - avoid criticisms and controlling statements
 - avoid tangible rewards for interesting tasks
- . Prevent ego-involvement in athletes.



Promote autonomy supportive

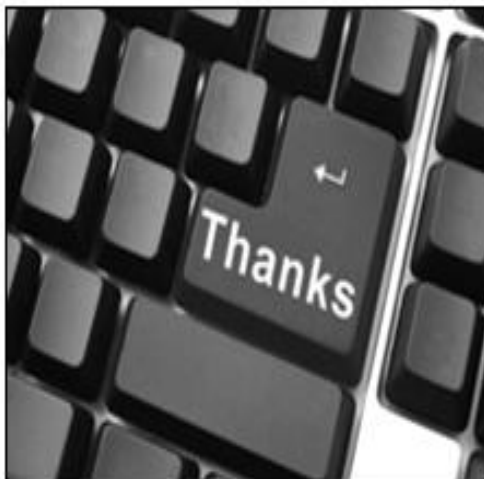
- Acceptance and understanding of individual differences.
- Cooperative learning to improve each others errors.
- Acknowledgment of each individual contribution to the team success (Team = sum of components)
- Stress evaluation based on individual success and achievement of individual goals.


Promote autonomy supportive

- Mixed team games (learning, respect, cooperation) (Mutual understanding and respect of values and customs of other cultures) (Kouli et al., 2009)
- Team members as persons beyond their ethnic and cultural background.
- Small groups teaching of skills (Better communication, less anxiety).
- This climate is more likely to foster assimilation.

Promote autonomy supportive


- Take into account the context (family, school, friends, ...) for athletes from different backgrounds.
- Give a choice in which tasks or drills to work on.
- Success as making progress, improving skills, and playing to the best of one's ability instead of just having the winning score.



 **Session two**


An exploration of coaching behaviors.

Name of PhD student: Sinabel Al-Khalaf
 Supervisor: Dr David Markland
 Supervisory Committee members: Dr Jeanette Thom (Chair)



Discussion

Last week session.



Promote autonomy supportive

- Acceptance and understanding of individual differences.
- Cooperative learning to improve each other's errors.
- Acknowledgment of each individual contribution to the team success (Team = sum of components)
- Stress evaluation based on individual success and achievement of individual goals.

Promote autonomy supportive

- Mixed teams games (learning, respect, cooperation) (Mutual understanding and respect of values and customs of other cultures) (Koull et al., 2009)
- Team members as persons beyond their ethnic and cultural background.
- Small groups teaching of skills (Better communication, less anxiety).
- This climate is more likely to foster assimilation.

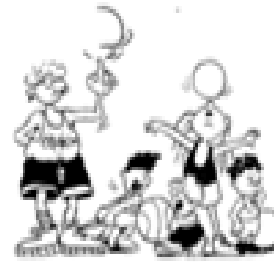
Promote autonomy supportive

-Make the assessment of the student (family, school, friends, ...) fair and take from different backgrounds.

-Encourage them to find tasks or skills to work on.

-Focus on making progress, improving skills, and playing for the fun of their ability instead of just being the winning team.

Practice within training session



Oliver is an average athlete. During the past few weeks she has appeared fatigued and has not been participating during training sessions. The coach she does to complain but she has not been completing training sessions. It shows concentration with her mother worried re useful information. The manager explains why the player's coach made it:

1. Express your love for the importance of finishing her training sessions since she needs to learn the techniques for her own peak.
2. Let her know that her coach's focus is that all of his sessions run and can't you can help her work on the issue of the fatiguedness.
3. Make her say after the training session will she say's session is done.
4. Let her see how she compares with the other athletes in terms of her training sessions and encourage her to work up with the others.

Your athletes have been having trouble staying motivated all year. How could you best help the athletes?


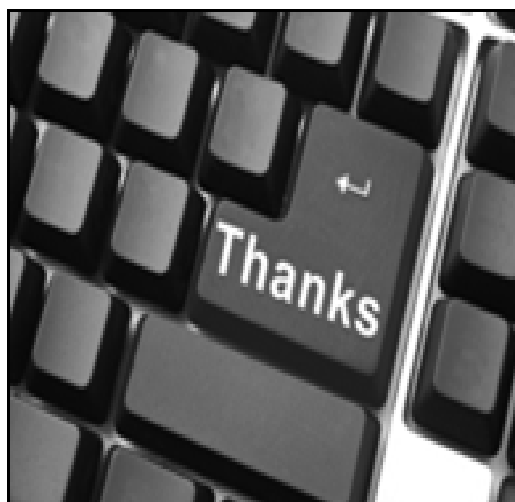
1. Place more regular training so that your athletes will be motivated to do so, will as the other coaches' athletes.
2. Make sure still encourage give them special privileges for improvements.
3. Place more athletes keep a training log and emphasize how important it is to have regular control of their training.
4. Help the athletes think ways of practicing skills together (such as taggates, games, and so on).

You should have been getting average results, and paid the focus for
 improve. Avoid approach might be to:

1. **Provide** for to help about for results, and what they mean for her.
2. **Describe** for results will for, paid, and where she stands in
 comparison to her fellow students.
3. **Discuss** for she should do better, she'll come quickly to figure
 something out with results like these.
4. **Ask** for you will not allow her to take responsibility, unless for results
 improve.

Conditions of Autonomy-supportive behaviours

- **Provide choices** within specific class and limits.
- **Provide a rationale** for tasks and limits.
- **Communicate** the other person's feelings and perspectives.
- **Provide options** and opportunities for initiative taking and independent
 work.
- **Provide meaningful, complex feedback**.
- **Understand** the situation.
- **Model** self-talk and self-reflection statements.
- **Model** language resources for identifying tasks.
- **Provide** appreciation for actions.





Appendix R

Control Group Training sessions


The English Version

Control 1

 **Session one**

An exploration of coaching behaviours.

Name of PhD student: Samiul Akhter
 Supervisor: Dr David Mackard
 Supervisory Committee members: Dr Jeanette Thom (Chair)



Discussions


1. What kind of coaching methods do you employ in your training sessions?
 Can you give examples?



2. How do you try to engage your athletes?



3. How do you think you can help athletes to train effectively?



4. What do you feel are the biggest challenges you face in your training?



5. What do you like to do best way of teaching? (Remember to provide, eg, visual, verbal?)




6. How do you take account of the possibility that your athletes may have differing levels of knowledge and may train at different rates?



Questions?

Control 2



Session two

An exploration of coaching behaviours.

Name of PhD student: Sarahal Al-Othali
Supervisor: Dr David Markland
Supervisory Committee members: Dr Jeanette Thom (Chair)

The slide features a background of various sports-related icons such as a soccer ball, a basketball, a tennis racket, and a runner.

Discussions

1. What do you think athletes feel are good qualities for a coach to have?



2. How do you think athletes can maximize their training?



3. How do you think you can facilitate your athletes to work effectively outside the training session environment?



4. What athlete behaviours do you think obstruct their training experience in training sessions?



Questions?

Appendix S

SDT Group Training sessions

The Arabic Version

تجربتي 1

اللقاء الأول

استكشاف سلوكيات التدريب

إسم طالبة الدكتوراه: سنان خلف
 المشرف: د. رشيد مزعلك
 أعضاء لجنة الإشراف: د. جيتيت فوم (رئيسة)

نقريه لهدج الات

إنوارد نيمسي وريتشارد ريان
جامعة روتشستر، نيويورك.

↓

تمودج جديد من الدافعية

↓

الدافع الداخلي (IM) والدافع الخارجي (EM) من ملامح علماء من أجل فهم السلوك البشري من السويكند
 في ألسنة (نيمسي وريان) 2007، عفرتك من رومحه (2011)

مصدرين من الدافعية

الدافع الداخلي يتم إنشائه من مبررات الجسد إلى الوساطة بالمداد (ريك
 بومبر، 2011، ص 65)

اللاصين المشغلين كالتالي:

الإشراك نتيجة البحث من السعة المتعلقة بقاء النشاط
 كالتوسط بالإشراك في المجال الرياضي بشكل إيجابي

الدافع الخارجي يتم الشعور أنه يتم تاديباً شديد من الأسماء بالمداد (عمر حن التال،
 لند حوه تيس لصال، السطاهر دلهة الدالة تقريبا) (أولاديا نيميا بالمداد، لرياسين)

التالي للإشراك في الرياضة يكون خارجي متناهي عن الجوانب
 والتي حلا ما تكون ملهبة أو ممتوبة.

العاجة للحجم

الاستجابة

• يساهم المدربون اللاصين حتى الشعور بالحرية في أخذ القرارات
 وتطبيق الاختيارات

التعريف

• يعمل المدربون حتى تطلب الأنشطة والتعبية أو اجدد الأبحاث
 والتطوير والتوقعات فيما يتعلق بالظفر في العوزة التعريفة

التعريف

• يساهم المدرب اللاصين حتى الشعور بشيء بهم، ويعتني
 بهم، وينفذ برؤيتهم.

نظرية تحديد الذات

يوجد ثلاثا نظريات أساسية وهي:

- 1- **النظرية الكلاسيكية**: تشرح كيف يتغير مفهوم الذات مع التغيرات البيئية والاجتماعية.
- 2- **النظرية الحديثة**: تركز على دور الفرد في تشكيل مفهومه للذات.
- 3- **النظرية المعاصرة**: تدمج بين النظريتين السابقتين.

أهمية التعلم الذاتي

ما دور التعلم الذاتي في حياتنا؟

هو العامل الرئيسي في نجاحنا في الحياة العملية.

التعلم المستمر

التعلم النشط

التعلم الذاتي



التعلم الذاتي

التعلم الذاتي هو العملية التي يتعلم فيها الفرد بنفسه دون الاعتماد على الآخرين.

التعلم النشط

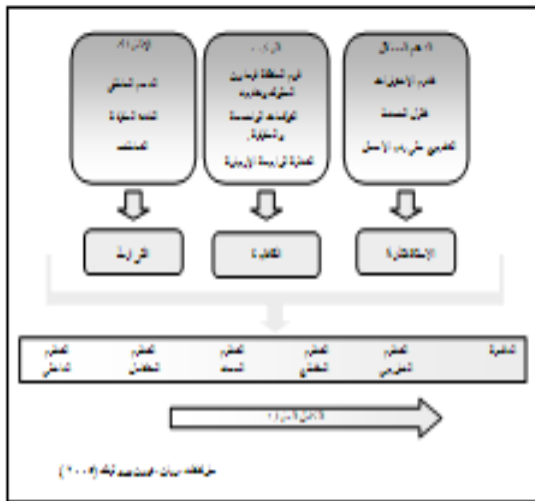
هو التعلم الذي يركز على المشاركة الفعالة للفرد في عملية التعلم.

التعلم الذاتي

هو التعلم الذي يركز على تطوير المهارات الشخصية والفكرية.

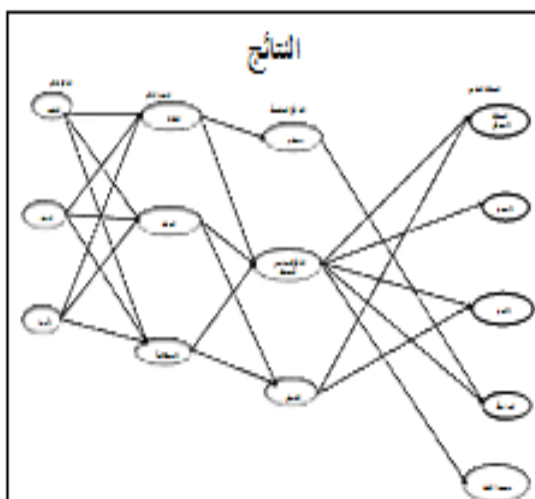
دور التعلم الذاتي في حياة الفرد





لدى إعدادي كمنسب كالتالي بين أهداف القوى البشرية:

- الإعداد
- اختيار - تدريب - تطوير - تطوير
- تطوير
- (٣١) من أهداف القوى البشرية.
- تنمية الموارد البشرية - تطوير - إدارة - تطوير - تدريب.



معنى الاستقلالية

عندما يقدم المدرب بعض التمارين لأدبيه

- قيمة
- أهمية
- اختياره ويؤديه
- أثر استقلالية

غير مهم

- يؤديه (إلزامي)

شروط السلوكيات الداعمة للاستقلالية

- توفير إمكانية الاختيار ضمن قواعد ولقود محددة.
- توفير أساس منطقي لتدعيم والحدود.
- الإعراف بمشاعر الأشخاص ووجهات النظر الأخرى.
- تزويد الرياضيين بفرص من أخذ المبادرة والعمل المستقل.
- توفير التغذية الراجعة للتغذية عن المبتدئين.
- تجنب السيطرة على السلوكيات:
- تجنب الانقطاعات وتصريحات سيطرة.
- تجنب التفاعلات السلبية لتدعيم تدعيم مشاعر التلاميذ.
- منع مشاركة الأنا بين الرياضيين.



تعزير السلوكيات الداعمة للاستقلالية

- قبول وتقبل الفرق القريبة.
- التمس التواضع من أجل تحسين أخطاء بعضهم البعض.
- الإعراف بكون مساهمة فرديّة مساهم في نجاح الفريق (فرق = مجموع من المكونات)
- يسهل عليهم إيجاد على النجاح الفردي وتحقيق الأهداف دونية.

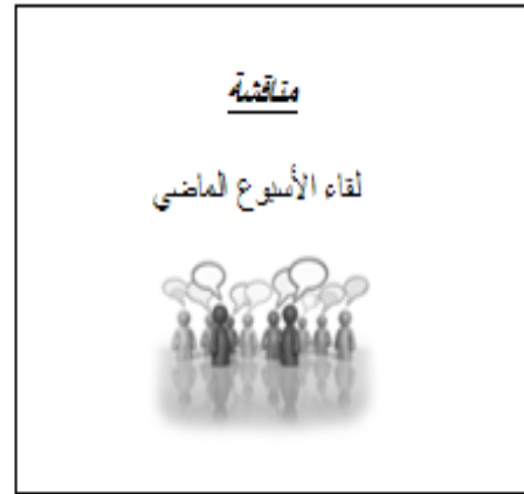
تعزير السلوكيات الداعمة للاستقلالية

- إعجاب الفرق المتخلفة (تتمتع بالإدراك والتعاون) حاولوا على نظام الاحترام للمبتدئين تلميذ ومقات وتقبل ثقافات الأخرى (كولمب وأخرون، ٢٠٠٩)
- ينظر لأعضاء الفريق كالأشخاص وراء خلقهم الجمالية والتفاني.
- تدعيم المجموعات منسوخة المبادرات (اتصالات أفضل، أفضى أكثر).
- من المرجح أن يبرز إذا التنازع من المتخلفة والتنازع.

تعزير السلوكيات الداعمة للاستقلالية

- الأخذ بعين الاعتبار السياق (الأسرة المدرسة الأصدقاء...)
- الخاص بالرياضيين المتضمن في ثقافات مختلفة.
- توفير الخيار التي يمكن به الاستمرار في إنجاز تدعيم والتدريب.
- النجاح يصنع التلميح وتحسين المبادرات، والتعب بكون ما أفضى الفرء من فرء بدلاً من مجرد الحصول على الفوز.





تعزيز السلوكيات الداعمة للاستقلالية

- الأخذ بمن الاحترام السابق (المدرسة، الأصدقاء، ...) الخاص بالرياضيين المصنوع (في خفقات مخطئة).
- توفير الخبر الذي يمكن به الاستمرار في إنجاز المهام والشرائح.
- النجاح يصنع الثقة، وتحسين المهارات، والتعب يمكن اما أوصى المرء من فترة بآلا من «مجرد الحصول على الفوز».

الممارسة خلال الدورة التدريبية



- تمر عبر رياضي متوسطة المستوى. ظهرت خلال الأسبوعين التاليين لمرور الفترة وتم تشجيعه خلال الدورة التدريبية العمل الذي قامت به كان صحيحة ولكنها لم تستعمل التمارين التدريبية. تم تشجيع المتعلمة الرياضية بنجاح ومن الالتجاء من أية محاولات مقلدة. تشجيع الأقرار عدوايا لتدريب حيو للقيام به بشكل لها بها.

- 1- إقناعها بأهمية الانتهاء من ممارسة التمارين التدريبية الخاصة بها حيث أنها تحتاج إلى دعم الأسلوب المناسبة الجيدة لتصلحها.
- 2- السماح لها بمعرفة أنها ليس من الضروري أن تقوم بالانتهاء من كافة التمارين في الوقت المحدد والتفكير في إمكانية مساعدتها على التعرف على سبب فترير الفترة.
- 3- السماح لها ببقاء بعد انتهاء الدورة التدريبية حتى ينتهي إجراء التمارين في ذلك اليوم.
- 4- السماح لها بالفتور مع الرياضيين الآخرين من حيث التمارين التدريبية الخاصة بها وتشجيعها لتحقيق برعب الآخرين.

لم يواجه الرياضيين له به صعوبة في الفناء باقي طوقان العمل.

كيف يمكنه مساعدة الرياضيين بشكل أفضل؟

- 1 . الحصول على مزيد من التدريب المنتظم لتكوين الدافع عند الرياضيين لتعلم بجداتهم وكذلك الرياضيين ذوي التمارين الآخرين.
- 2 . مساعدتهم على التدريب بشكل أكثر وضوحا وتصحيح التصورات الخاصة من أجل التعلم وتحسين المستوى.
- 3 . حيث كان رياضي على الاحتفاظ بسجل التدريب والتأكد على أهمية أن يكون لهم سجل جيد لتدريب الخاصة بهم.
- 4 . مساعدة الرياضيين على إتقان السباحة اللازمة للممارسة المهارات بما (مسابقات وألعاب، وألعاب، والله جوا).

Appendix T

Control Group Training sessions

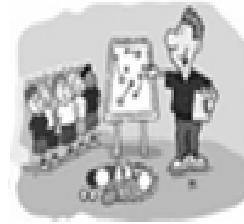
The Arabic Version



١-١- ما الفرق بين التفسير والتفويض؟



١-٢- ما الفرق بين التفسير والتفويض؟



١-٣- ما الفرق بين التفسير والتفويض؟



آية استفسارات؟



١- ما هو استنتاجك من هذا الفيديو؟



آية استفسارات؟