

A Comparative Study of Leisure Constraint Factors
on the Recreational Sporting Activities of English and
Iranian Students

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Contents

List of Tables	6
List of Figures	10
Abstract	12
Declaration	13
Notes on Copyright	14
Dedication	15
Acknowledgements	16

CHAPTER ONE : INTRODUCTION

1. INTRODUCTION.....	17
1.1 RECREATIONAL SPORTING ACTIVITIES AND LIFE-STYLE.....	17
1.1.1 <i>Participation in Recreational Sporting Activities</i>	18
1.1.2 <i>Constraints on Recreational Participation</i>	19
1.2 STATEMENT OF PROBLEM	21
1.3 RESEARCH OBJECTIVES	23
1.3.1 <i>Research Questions</i>	23
1.4 STRUCTURE OF THE STUDY.....	25

CHAPTER TWO: REVIEW OF LITERATURE

2. THE DEFINITIONS OF LEISURE, RECREATION AND SPORT	27
2.1 LEISURE.....	27
2.1.1 <i>Sport</i>	32
2.1.2 <i>Recreation</i>	34
2.2 PARTICIPATION IN RECREATIONAL SPORTING ACTIVITIES	37
2.2.1 <i>Methodological Issues</i>	38
2.2.2 <i>Socio-Demographic Variables in Recreational Sporting Activities</i>	41
2.2.3 <i>Participation in Recreational Sporting Activities and Age</i>	42
2.2.4 <i>Young Adulthood and Education in Participation in Recreation Sporting Activities</i>	43
2.2.5 <i>Participation in Recreational Sporting Activities and Gender</i>	48
2.2.6 <i>Participation in Recreational Sporting Activities and Socio-economic Status</i>	50
2.3 THE MODELS OF ASPECTS OF DEMAND, PARTICIPATION AND NON-PARTICIPATION...	51

2.4 LEISURE CONSTRAINTS FACTORS ON THE SPORTING ACTIVITY	59
2.4.1 <i>Definitions of Barriers and Constraints</i>	59
2.4.2 <i>Conceptual Classification of Constraints</i>	60
2.4.3 <i>Constraints Models</i>	62
2.4.4 <i>The Negotiation of Leisure Constraints</i>	71
2.4.5 <i>Ceasing Participation in Sporting Activities</i>	76
2.4.6 <i>Leisure Management and Leisure Constraints</i>	81
2.5 RELATED RESEARCH.....	86
2.5.1 <i>Relationship between Constraints and participation</i>	91
2.5.2 <i>Constraints on women's recreational sporting activities</i>	93

CHAPTER THREE: ENGLAND

3. GENERAL BACKGROUND.....	97
3.1 HISTORY AND POLITICS	97
3.1.1 <i>Government</i>	98
3.1.2 <i>Economy</i>	101
3.1.3 <i>The Environment</i>	102
3.1.4 <i>Area and Population</i>	102
3.1.5 <i>Climate</i>	103
3.1.6 <i>Religion</i>	103
3.1.7 <i>Recreational Sporting Activities</i>	108
3.1.8 <i>Higher Education</i>	112
3.2 MANCHESTER.....	113
3.2.1 <i>The University of Manchester</i>	115
3.2.1.1 <i>University Calendar</i>	118
3.2.1.2 <i>Sporting Facilities</i>	119
3.2.1.3 <i>The Athletic Union</i>	120

CHAPTER FOUR: IRAN

4. GENERAL BACKGROUND.....	122
4.1 HISTORY AND POLITICS	122
4.1.1 <i>Economy</i>	123
4.1.2 <i>Area and Population</i>	124
4.1.3 <i>Climate</i>	124
4.1.4 <i>Religion</i>	125
4.1.5 <i>Recreational Sporting Activities</i>	133
4.1.6 <i>Higher Education</i>	139
4.2 ESFAHAN	141
4.2.1 <i>The University of Esfahan</i>	142
4.2.1.1 <i>University Calendar</i>	143
4.2.1.2 <i>Sporting Facilities</i>	144

CHAPTER FIVE: PILOT STUDY AND METHODOLOGY

5. OBJECTIVES OF THE PILOT STUDY	146
5.1 METHODOLOGY	146
5.2 METHOD	146
5.2.1 <i>The Sample</i>	147
5.2.2 <i>Constraints of the Sampling Method</i>	148
5.2.3 <i>Instrumentation</i>	149
5.2.4 <i>Demographic Information</i>	149
5.2.5 <i>Recreational Sporting Activities Participation</i>	150
5.2.6 <i>Constraints on Participation in Recreational Sporting Activities</i>	151
5.2.7 <i>Expert Judges for the questionnaire's Review</i>	154
5.3 COMPARATIVE STUDY	154
5.4 RESULTS OF THE PILOT STUDY	157
5.4.1 <i>Constraints on Participation in Recreational Sporting Activities</i>	157
5.4.2 <i>Analysis of Items</i>	157
5.4.3 <i>Factor Analysis of Principal Component</i>	160
5.4.4 <i>Analysis of Sub-scales</i>	164
5.4.5 <i>Perception of Constraint Factors in ES samples</i>	166
5.4.6 <i>Significant Differences Between Participants and Non-Participants for Both ES and IS samples</i>	168
5.4.7 <i>Validity of the CPRSAQ</i>	172
5.5 SUMMARY OF PILOT STUDY	172

CHAPTER SIX: MAIN STUDY AND RESULTS

6. METHOD	176
6.1 DATA COLLECTION	176
6.1.1 <i>Sample Demographic</i>	177
6.1.2 <i>Sample Size</i>	178
6.2 RESULTS OF THE MAIN STUDY	179
6.2.1 <i>Constraints on Sporting Activities Participation</i>	179
6.2.2 <i>Item Analysis of the Constraints Scale</i>	180
6.2.3 <i>Principal Component Analysis of the Constraints Scale</i>	180
6.3 RELATIVE IMPORTANCE OF CONSTRAINTS DIMENSIONS	194
6.4 SUMMARY	198
6.5 DEMOGRAPHIC DIFFERENCES IN THE PERCEPTION OF CONSTRAINTS DIMENSIONS ..	200
6.5.1 <i>Gender and Perception of Constraints Dimensions</i>	200
6.6 SUMMARY	208
6.7 FREQUENCY OF SPORT PARTICIPATION AND NON-PARTICIPATION	210
6.8 THE RELATIONSHIP BETWEEN THE PERCEPTION OF CONSTRAINTS AND SPORT	212
6.9 SUMMARY	221
6.10 THE RELATIONSHIP BETWEEN PERCEPTION OF CONSTRAINTS AND FREQUENCY OF PARTICIPATION IN SPORT	222
6.11 SUMMARY	234
6.12 TWO WAY ANOVA FOR THE BOTH ES AND IS SAMPLES	236

6.12.1 Two-Way ANOVA for Both Participants and Non-participants And ES and IS samples	244
6.13 SUMMARY	251

CHAPTER SEVEN: DISCUSSION

7. DISCUSSION	252
7.1 CONSTRAINTS ON RECREATIONAL SPORT PARTICIPATION.....	253
7.2 THE RELATIONSHIP BETWEEN PERCEPTION OF CONSTRAINTS AND	265
7.3 DEMOGRAPHIC COMPARISONS OF THE PERCEPTION OF CONSTRAINTS BETWEEN ES AND IS SAMPLES	270
7.3.1 Similarities.....	270
7.3.2 Differences.....	271
7.4 THE RELATIONSHIP BETWEEN PERCEPTION OF CONSTRAINTS AND FREQUENCY OF PARTICIPATION IN SPORT.....	283

CHAPTER EIGHT: CONCLUSION AND NESSARY FURTHER RESEARCH

8. CONCLUSION.....	291
8.1 SUGGESTIONS.....	295
8.2 LIMITATIONS AND FURTHER RESEARCH	298
Bibliography.....	303
Appendix A: The Questionnaire (Pilot Study).....	326
Appendix B: The Questionnaire (Main Study).....	333
Appendix C: Item-total Correlations and Internal consistency Reliability of the Constraints Scales and Sub-scales (Pilot Study).....	341
Appendix D: Item-total Correlations and Internal consistency Reliability of the Constraints Scales and Sub-scales (Main Study).....	345

LIST OF TABLES

Table 2-1 Patterns of Participation in Great Britain (Source: Matheson, 1991, page 13) ...	40
Table 2-2 Participation in Physical and Sporting Activities: by Age 1993-94.....	43
Table 2-3 Enrolments in Higher Education: by Type of Course and Gender.....	46
Table 2-4 Participation in the Most Popular Sports, Games and Physical Activities: by Gender %	49
Table 2-5 A Decision Making Model of Recreation Behaviour	63
Table 2-6 Frequency of Reported Constraints for Women and Men.....	92
Table 3-1 Demographic of Manchester University Students 1996-97. December 96 Registrations.....	118
Table 3-2 Demographic of Manchester University Staff 1997	119
Table 4-1 Demographic of Esfahan University Students 1996-97. December 96 Registrations.....	143
Table 4-2 Demographic of Esfahan University Academic and non Academic Staff 1996-97.....	144
Table 5-1 Means, Standard Deviations for Each Item by (ES) Sample	158
Table 5-2 Means, Standard Deviations for Each Item by (IS) Sample	159
Table 5-3 English Students (ES) Principal Component Analysis of Constraints on Participation in Sporting Activities.....	162
Table 5-4 Iranian Students (IS) Principal Component Analysis of Constraints on Participation in Sporting Activities.....	163
Table 5-5 Reliability Analysis (ES)	165
Table 5-6 Reliability Analysis (IS)	166
Table 5-7 The Perception of Constraint Factors (Total samples of ES).....	167
Table 5-8 The Perception of Constraint Factors (Total samples of IS)	168
Table 5-9 T-test of Constraint Factors (Mean Scores) by ES Samples	169
Table 5-10 T-test of Constraint Factors (Mean Scores) by IS Samples.....	170

Table 5-11 2-Way ANOVA of Constraint factors (Mean Scores) participants and non-participants for IS & ES samples.....	171
Table 6-1 Sample Demographic.....	177
Table 6-2 Confidence Intervals and Sample Sizes	178
Table 6-3 Male & Female English Students (ES) Factor Analysis of Constraints on Participation in Sporting Activities.....	184
Table 6-4. Male English Students (ES) Factor Analysis of Constraints on Participation in Sporting Activities.....	185
Table 6-5. Female English Students (ES) Factor Analysis of Constraints on Participation in Sporting Activities.....	186
Table 6-6. Male & Female Iranian Students (IS) Factor Analysis of Constraints on Participation in Sporting Activities.....	187
Table 6-7. Male Iranian Students (IS) Factor Analysis of Constraints on Participation in Sporting Activities.....	188
Table 6-8. Female Iranian Students (IS) Factor Analysis of Constraints on Participation in Sporting Activities.....	189
Table 6-9 Reliability Analysis (Male & Female) Samples	191
Table 6-10 Reliability Analysis (Male) Samples	192
Table 6-11 Reliability Analysis (Female) Samples	193
Table 6-12 Conceptual Frame work	194
Table 6-13 (Male & Female) The Perception of Constraint Factors (Total samples of ES and IS).	195
Table 6-14 (Male) The Perception of Constraint Factors (Total samples of ES and IS).	197
Table 6-15 (Female) The Perception of Constraint Factors (Total samples of ES and IS).	198
Table 6-16 T-tests of Constraint factors (Mean Scores) by ES and IS Male and Female combined Samples	201
Table 6-17 T-tests of Constraint factors (Mean Scores) by ES and IS Male Samples	203
Table 6-18 T-tests of Constraint factors (Mean Scores) by ES and IS Female Samples ..	204
Table 6-19 T-tests of Constraint factors (Mean Scores) by ES Male and ES Female Samples	206
Table 6-20 T-tests of Constraint factors (Mean Scores) by IS Male and IS Female Samples	207

Table 6-21 Non-Participants and Level of Frequency of Participation (Number and Percentage).(ES) Samples.....	210
Table 6-22 Non-Participants and Level of Frequency of Participation (Number & Percentage).(IS) Samples.....	210
Table 6-23 Non-participation and participation in physical activities in the previous year by Gender in ES and IS sample (N & % of the population).....	211
Table 6-24 T-tests of Constraint factors (Mean Scores) by ES Male and Female combined Sample	212
Table 6-25 T-tests of Constraint factors (Mean Scores) for ES Male Sample.....	214
Table 6-26 T-tests of Constraint factors (Mean Scores) for ES Female Sample.....	215
Table 6-27 T-tests of Constraint factors (Mean Scores) for IS Male and Female combined Sample	217
Table 6-28 T-tests of Constraint factors (Mean Scores) for IS Male Sample.....	218
Table 6-29 T-tests of Constraint factors (Mean Scores) for IS Female Sample.....	220
Table 6-30 One-way ANOVA of constraint factors (mean scores) by participant group ES Male and Female combined Sample.....	223
Table 6-31 One-way ANOVA of constraint factors (mean scores) by participant group ES Male Sample.....	225
Table 6-32 One-way ANOVA of constraint factors (mean scores) by participant group ES Female Sample.....	227
Table 6-33 One-way ANOVA of constraint factors (mean scores) by participant group IS Male and Female combined Sample.....	229
Table 6-34 One-way ANOVA of constraint factors (mean scores) by participant group IS Male Sample.....	231
Table 6-35 One-way ANOVA of constraint factors (mean scores) by participant group IS Female Sample.....	233
Table 6-36 two-way ANOVA of Constraint factors (Mean Scores and Standard Deviation) for ES and IS male and female combined samples	237
Table 6-37 MANOVA Tests of Country (1,2) by Sex (Male and Female), and their Inter-relation	239
Table 6-38 MANOVA Tests of Country (1,2) by Sex (Male), and their Inter-relation.....	241
Table 6-39 MANOVA Tests of Country (1,2) by Sex (Female), and their Inter-relation..	243

Table 6-40 2-Way ANOVA of Constraint factors (Mean Scores and Standard Deviation) participants and non-participants for ES male and ES female sample	245
Table 6-41 MANOVA Tests of ES samples Non-Participants and Participants by Sex (Male and Female), and their interactions	247
Table 6-42 2-Way ANOVA of Constraint factors (Mean Scores and Standard Deviation) participants and non-participants for IS male and IS female sample	248
Table 6-43 MANOVA Tests of IS samples Non-Participants and Participants by Sex (Male &Female), and their Inter-relation	250

LIST OF FIGURES

Figure 2-1 Interrelationships between Socio-demographic Characteristics, Recreation Behaviour, and Attitudes toward Development.	42
Figure 2-2 Participation, Non-Participation and Demand	52
Figure 2-3 Participation, Ceasing Participation, Non-Participation and Demand.....	54
Figure 2-4 Typology of Participant and Non-Participant Groups.....	56
Figure 2-5 A Model of Non-Participation in Leisure Services	58
Figure 2-6 A Model Based on the Preference and Participation Relationship.....	67
Figure 2-7 A Model for Preference-Participation-Relationship	68
Figure 2-8 A Hierarchical Model of Leisure Constraints	69
Figure 2-9 Interaction Among Types of Constraints	74
Figure 2-10 Leisure Participation as the Product of a Balance between Constraints and Motivations	75
Figure 2-11 Classification of Respondents by Ceasing and Starting Activities	78
Figure 2-12 Interrelationships between Socio-demographic Characteristics, Recreation Behaviour, and Attitudes Toward Development.	89
Figure 6-1 Perception of Constraints Dimensions by ES and IS Male and Female combined Samples	202
Figure 6-2 Perception of Constraints Dimensions by ES and IS Male Samples	203
Figure 6-3 Perception of Constraints Dimensions by ES and IS Female Samples.....	205
Figure 6-4 Perception of Constraints Dimensions by ES Male and ES Female Samples...	206
Figure 6-5 Perception of Constraints Dimensions by IS Male and IS Female Samples	207
Figure 6-6 Percentage of Annual Physical Activities Non-Participants and Participants by Demographic Gender in ES and IS samples.....	211
Figure 6-7-Perception of Constraints Dimensions by Participants and Non-Participants for ES Male and Female combined Sample	213
Figure 6-8 Perception of Constraints Dimensions by Participants and Non-Participants for ES Male Sample	214

Figure 6-9 Perception of Constraints Dimensions by Participants and Non-Participants for ES Female Sample	216
Figure 6-10 Perception of Constraints Dimensions by Participants and Non-Participants for IS Male and Female combined Sample	217
Figure 6-11 Perception of Constraints Dimensions by Participants and Non-Participants for IS Male Sample	219
Figure 6-12 Perception of Constraints Dimensions by Participants and Non-Participants for IS Female Sample	220
Figure 6-13 Perception of Constraints Dimension by Frequency of Sport Participation for ES Male and Female combined Sample	224
Figure 6-14 Perception of Constraints Dimension by Frequency of Sport Participation for ES Male Sample	225
Figure 6-15 Perception of Constraints Dimension by Frequency of Sport Participation for ES Female Sample	228
Figure 6-16 Perception of Constraints Dimension by Frequency of Sport Participation for IS Male and Female combined Sample.....	230
Figure 6-17 Perception of Constraints Dimension by Frequency of Sport Participation for IS Male Sample.....	232
Figure 6-18 Perception of Constraints Dimension by Frequency of Sport Participation for IS Female Sample.....	234
Figure 6-19 Differences between Constraint Factors (Mean Scores) for ES and IS Male and Female combined sample	238
Figure 6-20 Differences between Constraint Factors by Participants and Non-Participants for ES Male and ES Female sample.....	246
Figure 6-21 Differences between Constraint Factors by Participants and Non-Participants for IS Male and IS Female sample.....	249

Abstract

This paper reports on a cross-cultural study aiming to determine and to compare constraints relating to participation in recreational sporting activities. Data were collected from two student surveys at Manchester (England) and Esfahan (Iran) Universities. Both sets of samples were divided into participation and non-participation groups. In the light of indicators from previous studies (Jackson and Dunn, 1991; Crawford and Godbey, 1987 and McGuire et al., 1989), constraints were subjected to factor analysis. They were then classified into three categories: intra-personal, interpersonal, and structural constraints and analysed to determine the differences between the English and Iranian students and between the participation and non-participation groups. The study found that structural constraints (money, facilities, time, and transportation) were rated significantly higher than intra-personal and interpersonal constraints amongst both English and Iranian samples. However, all the mean scores for the constraint factors for the Iranian samples were higher than the English samples. For participants and non-participants in both English and Iranian samples, the investigation provided support for the hierarchical model of leisure constraints (Crawford, Jackson and Godbey, 1991), and the "hierarchy of importance" (Crawford et al., 1991), "negotiation" and "balance" (Jackson, Crawford and Godbey, 1993) propositions, which followed the introduction of this model. The implications of these findings are discussed in terms of the planning, provision and management of sport-related services in the area of the study, and a cross-cultural comparison. The paper also discusses methodological and theoretical considerations and implications.

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Mohammad Ehsani is a graduate of Tehran University, Iran, Tehran. He is senior lecturer in the university of Esfahan. He is a member of the International Society for Comparative Physical Education and Sport (ISCPES).

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Dedication

To my parents and to my family for all their support during my studies

Thanks be to **GOD**

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First of all I would like to thank God for his mercy and guidance in enabling me to complete this work successfully. It is my hope that this work will be to benefit of other people as well.

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CHAPTER ONE

Introduction

1. Introduction

In the twentieth century there have been significant technological advances and changes which have had a profound effect on the work — free time relationship, as well as on participants and spectators, and on engagement in leisure-related projects and sporting, recreational and entertainment activities (Roberts and Olszewska, 1989). Preference for participation and its impacts on leisure activities differ widely between and within countries. The most important factors in participation in recreational sporting activities are economic, politico-ideological, cultural, social, religious, educational, and racial (Holmes, 1981).

1.1 *Recreational Sporting Activities and Life-style*

Across the world there have been attempts to encourage physical recreation as a factor of a healthy life-style. There is much evidence that physical activity has a beneficial effect on life quality, for instance in the studies of Paffenbarger, Hyde, Wing, and Hirsch, 1986 and Paffenbarger, Wing and Steinmetz, 1984). Blair, Kohl, Paffenbarger, Clark, Cooper and Gibbons (1989) have suggested that participation in physical activities can have a significant positive effect on morality. Hence, it could be argued that increased physical activity might have a long range positive effects on nations' and individuals' well being, public health and

productivity. Additionally, other benefits have been acknowledged by investigators: psychological (Berger and Owen, 1987; Liponski, 1994), social (Wankel and Berger, 1990), and physical (Lance, 1978; Pate, 1983; Shephard, 1995). Some of the research reveals an association between engagement in physical activity and improved performance in the workplace (e.g., Kimiecik and Lawson, 1996; Wallace, 1996) and reductions in medical treatment and rehabilitative costs (e.g., Gratton and Taylor, 1985). According to Hardman (1995) there are two controversial ideas, each with protagonists and antagonists. One protagonist, Sage (1986) indicated that:

“... sedentary life-style health problems, obesity and decline in levels of physical activity and consequent lower levels of fitness, health-promoting form of human activity essential for character building and forming valuable positive attitudes towards life, and without which, profitable experiences are denied; social maturity (confidence etc); realisation of potential; development of self-esteem; reinforcement of achievement, effort and pursuit of personal goals; enhancement of knowledge and understanding through learning about broader society; and respect for authority and ambition”.

1.1.1 Participation in Recreational Sporting Activities

Different perspectives on participation in sport related to indicators of well-being, such as life satisfaction (Kelly, Steinkamp and Kelly, 1987; Ragheb and Griffith, 1982; Riddick and Daniel, 1984), behavioural (Ragheb and Tate, 1993), planning (Coalter, Dowers and Baxter, 1995), and sociological factors (Kelly, (1980) have been examined. Moreover, Kelly (1980) examined the factors which influence an individual's decision to participate in sports. The results of his investigation showed the degree to which participation in sport can be predicted. Several researchers (e.g., Cutler, 1976; Hoyt, Kaiser, Peters and Babchuk 1980) failed to identify any relationship between formal activities and well-being. They found that

a number of informal activities, like being only in the company of friends, were associated with life satisfaction (Lemon, Bengston and Peterson, 1972). The vast majority of these studies were conducted at both national and local levels in countries such as the U.S.A, Canada and Great Britain. These investigations have been concerned with issues related to participation in sports, providing up-to-date data about patterns of such participation. These issues are of particular importance for those considering investment in sports provision. In this study, two universities (Manchester and Esfahan) were selected and compared. The two institutions were selected because they are among the biggest universities in their own countries, have a wide range of study subjects and students from varying socio-economic and cultural groups. For example, Manchester University Students (MUS) are not only English but also Scottish, Welsh and may be other nationalities. It should be noted that while there are a number of studies concerning participation in recreational sporting activities in America and Great Britain, this issue has been widely neglected in Iran.

1.1.2 Constraints on Recreational Participation

In recent years, the questions of leisure constraints and leisure activities have been of growing interest to researchers. This is evidenced by the increasing bulk of the related literature (Jackson, 1988, 1990a, 1991, 1993; Goodale and Witt, 1989; Wade, 1985; Godbey, 1985; Henderson, Stalnaker and Taylor, 1988; McGuire, O'Leary and Yeh and Dottavio, 1989). The literature indicates that any factor which prevents a person from participating in leisure activities can be defined as a constraint (Crawford and Godbey, 1987). The concept of "constrained leisure" has emerged in the leisure studies literature, and there has been an emphasis on the types of leisure constraints and the extent to which they act as barriers to participation in recreation activities. The field of leisure constraints has been widely recognised as prominent in leisure research, and has been well documented

(e.g., McGuire and O'Leary, 1992; and Veal and Cushman, 1996). The field is particularly interesting in that it has enormous potential to link theory with practice.

Crawford and Godbey (1987) have suggested that "constraints" is a more inclusive term than "barriers" and that the term is now widely established. Many researchers have noted that constraints can be reduced by the action of leisure providers, thus leading to higher participation levels in leisure activities (e.g., McGuire and O'Leary, 1992). Also, the concept of constraints involves such phenomena as constraints on leisure satisfaction and enjoyment of current activities (Francken and Van Raij, 1981; Witt and Goodale, 1981). Moreover, specific leisure constraints have been studied within certain population sub-groups.

Leisure constraints' surveys have been carried out mostly in the United States and Canada, and to a lesser extent in England and Holland, at national, regional and local levels. There has also been an attempt to develop methodologically, theoretically, and conceptually sophisticated models of leisure constraints over the past decade (e.g., Crawford, Jackson and Godbey, 1991). Studies have been carried out within different conceptual models of leisure constraints and some authors have acknowledged a need to examine the operation of, and relationship among, forms of constraints (Crawford and Godbey, 1987; Henderson, Stalnaker and Taylor, 1988; and Jackson, 1990b).

Francken and Van Raij (1981) have divided constraints into "internal" and "external". "Internal" constraints include personal capacities, abilities, and knowledge, and "external" constraints include such factors as money, time, facilities and transportation. Crawford and Godbey (1987) have suggested that constraints can be understood within the broad context of a leisure preference participation relationship. They made the first systematic attempt to classify leisure constraints into three categories according to the way they affect preference and participation. The model identified three dimensions of constraints (intra-personal, interpersonal and structural) and was developed further by Crawford, Jackson and

Godbey (1991). However, this model, which provided the basis for further theoretical developments in the field of leisure constraints research, has had little empirical verification so far. Many models have been presented, such as the “negotiation” and “balance” models by Jackson, Crawford and Godbey, (1993) and the “hierarchy of importance” model by Crawford et al., (1991). The “negotiation” model suggests that participation might be the result of a successful negotiation of leisure constraints. The “balance” model suggests that the interaction between strength of motivation and perception of constraints might be significant components of the successful negotiation of leisure constraints, although it has not yet been empirically investigated. The “hierarchy of importance” model suggested that constraints might be arranged hierarchically, and that intra-personal constraints might be the most powerful and structural constraints the least powerful components of leisure participation.

1.2 Statement of Problem

With the sophisticated communications systems widely available to us, we now have the opportunity to contribute to better international understanding through rigorous but sensitive research within and between differing ideological and cultural groups.(Standeven, 1991 p71). Through comparative (cross-national) studies, valuable insights can be gained into social behaviour. In the last two decades, there has been a growing interest in cross-cultural leisure investigation and this has contributed to our understanding of essential behavioural determinants in sporting and physical education activities (Vertinsky, 1990; and McDonald and McAvoy, 1997).

As stated before, there has been an absence of research on the constraints on participation in recreational sporting activities in Iran. This has motivated the present study. The results

of the study might be used in the management of sport-related services in the field of the study.

This cross-cultural study compares patterns of constraints on recreational and sporting activities participation among students of Manchester (England) and Esfahan (Iran) Universities.

Cross-cultural studies have long been supported and carried out (e.g., Price-Williams, 1985) and provide a base for making generalisations about human behaviour. However, few cross-cultural studies have been carried out in this field, even though cross-cultural comparisons can make significant contributions to the generalisability argument (Ingham, 1986).

According to Standeven (1991) the comparative study in the area of Education for Leisure was initiated in 1985 to explore Hendry's idea that schools were continuing to concentrate their resources on attempting to satisfy short-term aims in the provision of recreational activity, rather than tackling the more long-term process of education for leisure (see Hendry, 1985). Standeven and Thompson (1986) examined the initial comparative work on the area of education for leisure which reported in symposium in Vancouver.

Comparative may occur at many levels, both within and between countries. The clarity and utility of such comparison is enhanced by the selection of readily identifiable dimensions.

The establishment of what Rigauer (1979) termed a "conceptual frame" is an integral part of a systematic comparative investigation. The particularly problematic fields of leisure and leisure education impose an even greater urgency and weight to such a conceptual scheme.

It is obvious that the terminological and theoretical problems stated above are related to matters of content. In recent years leisure researchers have investigated constraints on participation in recreational sporting activities. Many researchers are concerned with how and why people make choices about their free time, recreation and leisure activities

(Henderson *et al.* (1988). This investigation was based upon a model of constraints on recreation and leisure originally proposed by Crawford and Godbey (1987), and developed by Crawford, Jackson, and Godbey (1991) which involved three distinct constraints on leisure participation: intrapersonal, interpersonal, and structural

1.3 Research Objectives

In the light of the above discussion, the main objectives of the present study were as follows:

- A) To explore and compare the perception of the constraints on participation in recreational sporting activities amongst two selected populations in different ecological and cultural settings and how these populations are affected by them.
- B) To examine the relationship between perceived constraints and participation and non-participation in recreational sporting activities.
- C) To examine the relationship between perceived constraints and frequency of participation in recreational sporting activities.

1.3.1 Research Questions

1. Are there any differences between English (MUS) and Iranian (EUS) participants with respect to recreational sporting activities?
2. Are there any differences between male English (MUS) and male Iranian (EUS) participants with respect to recreational sporting activities?
3. Are there any differences between female English (MUS) and female Iranian (EUS) participants with respect to recreational sporting activities?

4. Are there any differences between male and female Iranian (EUS) participants with respect to recreational sporting activities?
5. Are there any differences between male and female English (MUS) participants with respect to recreational sporting activities?
6. Are there any differences in how participant and non-participant samples in England (MUS) and Iran (EUS) perceive constraint factors in terms of their importance?
7. Are there any differences in how participant and non-participant (male) samples in England (MUS) and Iran (EUS) perceive constraint factors in terms of their importance?
8. Are there any differences in how participant and non-participant (female) samples in England (MUS) and Iran (EUS) perceive constraint factors in terms of their importance?
9. Are there any differences between English (MUS) and Iranian (EUS) samples in terms of constraints on participation in recreational sporting activities with respect to three categories: intrapersonal, interpersonal and structural ?
10. Are there any differences between (male) English (MUS) and Iranian (EUS) samples in terms of constraints on participation in recreational sporting activities with respect to three categories: intrapersonal, interpersonal and structural ?
11. Are there any differences between (female) English (MUS) and Iranian (EUS) samples in terms of constraints on participation in recreational sporting activities with respect to three categories: intrapersonal, interpersonal and structural ?
12. Are there any differences between English (MUS) and Iranian (EUS) participants and non-participants in recreational sporting activities in terms of their constraint factors?
13. Are there any differences between (male) English (MUS) and Iranian (EUS) participants and non-participants in recreational sporting activities in terms of their constraint factors?

14. Are there any differences between (female) English (MUS) and Iranian (EUS) participants and non-participants in recreational sporting activities in terms of their constraint factors?
15. What is the relationship between the perception of the dimensions of constraints and frequency of participation in sport among male and female combined English (MUS) and Iranian (EUS) samples, male English (MUS) and male Iranian (EUS) samples, and also female English (MUS) and female Iranian (EUS) samples.

The aim of this study is to carry out a cross-cultural empirical study of constraint factors in recreational sporting activities. More specifically it tests the model of constraints (intra-personal, interpersonal, and structural), as proposed by Crawford *et al.* (1991), and its relationship with actual participation levels in specific recreational sports activities in the two countries, England and Iran.

1.4 Structure of the study

Chapter Two presents a systematic review of the current literature on constraints or leisure and recreational sporting activities.

Chapter Three examines the English context of study for comparative study (objective 1). It seeks to explain the emergence, in the English economics, politico-ideological, ecological and cultural settings. England is a progressive industrial country.

Chapter Four examines the Iranian context of study for comparative study (objective 1). It seeks to explain the emergence, in the Iranian economics, politico-ideological, ecological

and cultural settings. Iran is a Persian Islamic country in which the issue of the role of women is one of considerable importance. This is because of the philosophy underlying participation in recreational sporting activities.

Chapter Five examine the pilot study conducted in order 1) to determine the method of data collection and the sampling procedures. 2) To improve and standardise the research instrument by using statistical procedures. 3) To examine the construction and the organisation of the instrument. 4) To assure the researcher that the instrument can gather the research information required due to achieve the objectives of the main study. Also the methodology of the study was considered.

Chapter Six presents the findings from the field work conducted in both England and Iran. The findings relate to the questionnaire survey of students participation in recreational sporting activities in both countries are presented as a comparative study (objective 1). The findings present the relationship between perceived constraints and participation and non-participation in recreational sporting activities (objective 2). The findings presents the relationship between perceived constraints and frequency of participation in recreational sporting activities (objective 3).

Chapter Seven discusses the detail of the findings shown in chapter six.

The final chapter, Chapter Eight, seeks to draw conclusion from the study as a whole, to acknowledge its limitations, and to set out a series of recommendations for policy- and decision-makers in related fields. It also suggests issues for further research.

CHAPTER TWO

Review of the Literature

2. The Definitions of Leisure, Recreation and Sport

In this chapter, a review of various definitions of leisure, recreation and sport is presented since these concepts have been variously analysed and described in the literature.

2.1 Leisure

According to Kelly (1982 and 1983) and Haywood, Kew and Bramham (1993), the variety of definitions of leisure utilised for different disciplines and areas of study implies that defining and conceptualising leisure is a highly debatable, complex issue.

The English word, “leisure”, is derived from the Latin ‘licere’, meaning to be free or to be permitted. Also the word 'leisure' is associated with a complexity of meanings in the English language. Generally it is defined as 'freedom from constraints', 'opportunity to take', 'spare time after work' or as 'free-time after obligatory social duties', leisure is also defined as an activity selected in relative freedom for its qualities or satisfaction. In addition, according to Parry (1977), *leisure as a social phenomenon itself, 'involves social constraints and obligation and can best be thought of as being embodied in a whole way of life. Such an idea immediately invokes the concept of culture'* (Torkildsen, 1992).

Kelly (1982) suggested that leisure is freely selected because of the activity or the companions or some combination of the two promise personal satisfaction. Thorsten Veblen (1953) defined leisure as the "*non productive consumption of time*". In other words, leisure involves, sports, culture, social interaction, or some kind of activity that looks like work but is not.

Dumazedier (1974), pointed out that leisure is an activity (apart from the obligations of work, family, and society) to which the individual turns at will, for either relaxation, diversion, broadening his information and his understandable social participation, or the free exercise of his creative contents. Dickinson (1976) utilised the term "leisure" to describe an activity which is freely selected. According to him it also refers to spare time after we have finished work and everything else we have to do.

The New Shorter Oxford English Dictionary defines relaxation as a release from mental or physical tensions particularly by recreation or rest (Stebbins, 1997). Rojek's (1995) view that post modern leisure is mainly casual conforms with this line of reasoning.

According to Rikelly (1972) leisure is not fully realisable, and therefore, is an ideal rather than an idea. It refers to a state of being, a condition of man, which few desire and fewer accomplish. Not everybody can have free time, but everybody can have leisure. For Coalter (1989), socio demographic variables associated with participation in specified types of activity, such as age, sex, marital status, and a series of factors linked with social class, including occupation, education, income, and so on, have emerged as useful predictors, enabling reasonable assessments of future trends to be made.

Every individual has his or her philosophy of life, and it is not important how unclear and how inarticulate we might be in defining it. We all want to have leisure to live better, and without constraints. Whilst the "good life" is ideal for one and all, it will be a long time in the future before it is possible to establish appropriate policies for the planning, provision and management of leisure for everybody (Torkildsen, 1992). According to Henry (1993),

our philosophy of leisure is based on our culture, social and economic systems, a belief in human rights, equal opportunities, personal dignity and a belief that what is good and elevating for the individual is also good and elevating for the community.

It is difficult to present a single definition of leisure. It is affected by a range of personal, social and situational factors. Hence, there is a variety of definitions for leisure in the literature.

Over the past three decades, leisure has emerged as an important sphere of life. It now has to do with satisfying experience. Torkildsen (1992)'s view is that it is a feature of excellence of life-style and a form of personal expression.

Many researchers have tried to educate for leisure, particularly through physical education and sports programmes in schools, providing a focus for a systematic comparative analysis across countries on both sides of the Atlantic. For example, Standeven and Thompson, (1988) embarked on a scheme of study initially comparing England and Canada, and both developed it to encompass four countries: England, Canada, U.S.A, and the Republic of Ireland through a team approach (Duffy, et al. 1989 and Standeven et al. 1989), and has continued to improve the extent of knowledge and conceptualisation of education for leisure in comparative contexts through the use of both quantitative and qualitative research methods. Standeven (1991 p70) suggested that a series of questions should be utilised rather than a single question in this type of study. Further, Standeven (1991) noted that the time when someone does not have any concerns or work assignments is an arbitrary time when feelings of drive are minimal. Leisure is a block of time during which an individual has freedom of choice about what to do or what not to do.

According to Graefe and Parker (1987) and Tinsley and Tinsley (1982), leisure as a holistic concept can be experienced in a wide variety of activities such as work, play, education, and religion. Since the artificial demarcation of work and play have increasingly blurred. This

may be due, for instance, to new ideas about how and when work must take place or the advent of egalitarian social opportunities for all people.

This post- industrial society would release leisure from the constraints of work, occupation, or class and extend leisure choices.

According to Cheek and Burch (1976), this encouraged sociologists of leisure to investigate for an "essential" and measurable definition of leisure that would reveal variations in leisure behaviour among individuals and make it possible to examine the correlation between these individual leisure habits and miscellaneous associated variables such as education, gender, occupation, income, age and race

Clarke and Critcher (1985) stated that: *Today, sociologists are more aware than ever before that leisure, apparently that part of our lives where we are most free, is just as much "contested terrain" as is the world of work*

Mundy (1987) pointed out that increasingly people now expect their governments to provide them with their leisure rights, to rectify leisure injustices, and to provide leisure opportunities in those mixed economies where the market has not provided them. On the other hand, both the state and the people pursue leisure satisfaction. The market place imposes controls on leisure choices in an effort to maintain "law and order" and "public benefit". Both subordinate groups and members of leisure subcultures oppose these efforts to control their play through individual rebellion and collective resistance.

Mundy and Odum (1976) stated that:

leisure education today is defined in a variety of ways, see it as "a total developmental process through which individuals develop an understanding of self, leisure, and relationship of leisure to their own life-styles and the fabric of society.

Many researchers, including Peterson and Gunn (1984), Thompson (1991), Innes (1983), Munn Committee (1977), Mundy and Odum (1979), Parker (1976) and the U.S. Bureau of

Education (1981) supported the concepts of leisure education in typical activities, and of developing attitudes which present an awareness and comprehension of the opportunities for leisure recreation including rational gratification. Leisure has been described as an "*increasingly important element of the social structure of contemporary industrial society*". Other contributions of the 1980s present systematic and comprehensive studies to develop psychometrically sound instruments and tests to measure leisure behaviour. Among these are Witt and Ellis's (1984) significant investigations of "the leisure diagnostic battery" made in order to measure perceived freedom in leisure, the development of instruments to measure leisure satisfaction by Ragheb and Beard (1980), to measure leisure motivation by Beard and Ragheb (1983) and to measure leisure attitudes by Ragheb and Beard (1982). Also of note are Mannell's self-as-entertainment construct (1984), and Iso-Ahola and Weissinger's scale (1987) to measure people's perceptions of leisure as apathy. The theoretical basis of all these instruments resides in the constructs, concepts, and analyses of social psychology. The development of such tests is encouraging, as it demonstrates that the social psychology of leisure not only helps in understanding leisure behaviour better, but also leads to actual results benefiting practitioners.

The concept of leisure appears to be largely of western origin, and certain terms indicating leisure as a whole do not occur in non-western languages, although apparently all languages contain words that refer to recreative activities or events. The definition of leisure in western culture makes it difficult for us to create the proper theoretical framework for leisure. More significantly, during the heyday of functionalism in anthropology, i.e., the 1930s, 40s, and 50s, factors of culture that were regarded as more or less trivial, such as researching the demand for play and leisure, were seen as secondary in significance to factors such as kinship, economic and political organisation, and maintenance of existing facilities. Even such expressive systems as religion, mythology, and belief systems were

regarded only in relation to social organisation and hence societal homeostasis rather than being considered in their own right.

According to Cross (1983, p 26) in the 1830's and 1840's, reformers, seeking a legal reduction of the working day to ten or eleven hours, met with strong resistance from employers, who generally advocated an unregulated economy, and from conservatives, who believed that increased leisure would only lead to debauchery or political agitation.

In most modern conceptualisations, leisure is equated with time free from work and other obligations. Perhaps one reason why contemporary philosophies of leisure are so rarely positive and so difficult to hold is that this conceptualisation tells us not so much what leisure is but rather what it is not: it is not work or obligated time. In addition, it tells us what we are free from doing, without indicating what we are free to do.

A further view is that leisure is no longer determined in contrast to work, but is seen as an overriding experience that determines the quality of both working and non-working time.

2.1.1 Sport

According to Kelly (1982), sport is an organised activity in which one's physical effort is related to that of others in some relative assessment of results with accepted regularities and forms. The same author also suggested: *If leisure is defined in terms of relative freedom of choice and intrinsic satisfactions, then much sport is certainly leisure for the participant.*

The organised and goal-oriented physical exertion of sport is chosen by participants because that form of activity produces for them particular outcomes that are found satisfying. On the other hand, for some participants, sport is surely not leisure. (Kelly, 1982).

Greendorfer (1986) argued that sport has become one of the most popular social phenomena of the twentieth century. Not only is it a popular leisure activity , but a social

organisation that spreads out over several aspects of social life. As Lueschen (1980) stated by definition, sport is a competitive activity that falls along the continuum between play and work. According to Greendorfer (1980) most of the social studies of sport have been carried out from both theoretical and applied perspectives. In spite of the social importance of sport for both leisure and work, to date too few scholars have been actively engaged in examining how sport is integrally related to social processes, groups, social organisations and society at large.

Mostly, the term sport has been used as synonymous with physical activities. The Council of Europe (1980) adopts the following definition for sport:

“Sport means all forms of physical activity which, through causal or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels” (European Sport Charter, p.1). On the same lines, the European Sport Charter categorised sport-related activities as follows:

- A) Competitive games and Sports,** *which are characterised by the acceptance of the rules and response to opposing challenge.*
- B) Outdoor pursuits,** *in which participants seek to negotiate some particular “terrain” (signifying in this context an area of open country, forest, mountain, stretch of water or sky). The challenges derive from the manner of the negotiation adopted and are modified by the particular terrain selected and the conditions of wind and weather prevailing.*
- C) Aesthetic movement,** *which includes activities in the performance of which the individual is not so much looking beyond himself and responding to manmade or natural challenges as looking inward and responding to the sensuous pleasure of patterned bodily movement, for example dance, figure skating, forms of rhythmic gymnastics and recreational swimming.*

D) Conditioning activity, i.e. forms of exercise or movement undertaken less for any immediate sense of kinaesthetic pleasure than for long-term effects the exercise might have ... improving or maintaining physical work capacity and rendering subsequently a feeling of general well-being

(European Sport for All Charter, Council of Europe, 1980).

2.1.2 Recreation

The meaning of the term “recreation” is as arguable and difficult to define as “leisure”. The word stems from the Latin *recreatio* , meaning “restoration or recovery”. Recreation involves restoration or wholeness of mind, spirit and body. The restoration of the ability to function has been implied as a term for the re-creation of energy. On the other hand, leisure has been defined more and more as a human phenomenon in its own right rather than something different from or leftover after work. It involves some other activity that drains, tires, or deteriorates that wholeness. Thus there is not necessarily any activity in the realm of recreation, whilst leisure generally refers to more organised activity. Recreation is seen as being organised for social ends (Kelly, 1982).

According to Dutler (1976), the term “recreation” is defined with reference to freedom and direct satisfaction. He stated that: *"Recreation may be experienced at any time and any where". When leisure is defined as free time, then recreation may be said to refer to activity carried out within that time. Many recreation theories view the concepts of play and recreation as one and the same thing.* Other theories take two different positions. However, the view that recreation is adult activity and play children's activity has been predominant.

The Dictionary of Sociology defines the term “recreation” as:

“any activity pursued during leisure, either individual or collective, that is free and pleasant, having its own immediate appeal, not impelled by a delayed reward beyond itself” (p.251).

Because of the impact of recreation on the individual and society, recreation is a highly significant component of one's life. In terms of recreation management, recreation is not only individual, but also a group activity, well established in systems of public recreation, physical education, sport, art, planning and management.

Any activity that does not create the same kinds of feelings as sports activities, may fail to produce a recreational result. However, Torkildsen (1992) suggests that the complexity of the inter-relationships between recreation and feeling make it almost impossible to construct a unified theory.

Although the role of religion and the religion/recreation relationship, in contemporary society is much different from what it was before, its influence upon human values, including those of leisure and recreation, is still very significant. For instance, whilst the Renaissance brought about more freedom for leisure, the Reformation has been shown to have had an even greater effect on Western attitudes. The Reformation was a period which idealised work and distrusted the evils of leisure—a work ethic which has persisted throughout the twentieth century. The Protestant ethic sought to condition leisure to behaviour fitting men and women for devotion and work. The humanism of the Renaissance sought the creativity and development of people through education and greater freedom in leisure. Regrettably, yet another revolution was to suppress still further the leisure development for the mass of the people. Islam has a different outlook on leisure and recreation forbidding such activities as drinking alcohol, gambling and dancing. Also under Islam all physical activities are separate for men and women and there are limitations on any outdoor physical activities for women. Leisure and recreation are made possible by means of a range of services and facilities, both indoor and outdoor, in and around the home, in the

urban environment, in the rural areas and in the countryside. Many demands are met through resources and equipment in the home. Some demands are met, in part, through outdoor facilities such as gardens and open spaces, allotments, play areas and sports grounds. Other demands are met, in part, through a range of indoor facilities for entertainment, literary activities, drama, art, and music, education, sport and physical recreation hobbies and pastimes and also religious themes and spiritual insights. Recreational opportunities have been influenced by religious leaders and organisations which are generally in the forefront of movements to develop such programmes as public recreation, community education, youth sports, ethnic festivals, museums and cultural centres, and numerous other local and regional projects.

According to Graefe and Parker (1987), a special section of the population, represented by the disabled and the disadvantaged have also gained increased access to recreational opportunities with the support of the religious community.

There are many definitions for leisure, recreation, and sport. The present study is not intended to develop a philosophy or theory for them, but will focus mainly on sport activities during leisure time, which will be referred to as recreational sporting activities. On the other hand, the terms leisure and recreation will be considered as interconnected.

Multi-national investigation can expand this perception and improve this practice. As Form (1979) pointed out, much of the cross-national investigation in the behavioural sciences focuses today upon the discussion about whether there should be a convergence or dissimilarity of cultures. He added that one anticipates cultural differences to be more marked in recreational than in competitive physical activities. The present study will use the terms in relation to both countries (England and Iran). The definitions of these terms have been adopted for the main purpose of study because in order to transcend the political and cultural boundaries of two countries this is a basis for valid comparison.

2.2 Participation in Recreational Sporting Activities

According to Sillitoe (1969) Emmett (1971) Roberts (1978) and Boothby, Tungatt, Townsend, and Collins (1981) there is a complex relationship of mixture and interaction between participation and constraints which comes into play when people consider information about what leisure activities are available and how often they will participate. Some perceivable factors are outlined which individually, jointly or collectively affect participation. Sport and physical activities have been influenced by social factors and the individual's preference for taking part in one activity rather than another. There are two opinions concerning recreational sporting activities. The first, put forward by Kelly, Stein-Kamp and Kelly (1987) Ragheb and Griffith (1982) and Riddick and Daniel (1984) is that frequency of participation in activities is related to various indicators of well-being such as life satisfaction. The second advanced by Lemon, Bengtson, and Peterson (1972) is that among a group of measures that operationalised activity, only informal activities with friends were associated with life satisfaction. Various perspectives have been utilised in recreational sporting activities, but they are not comprehensive, since they do not take into account the complexity and variety of influences which bear on an individual. In addition, even if people have identical circumstances and opportunities, still one person may choose one activity and another something entirely different. Social demographic variables such as age, gender, income, socio- economic group and educational background have been proposed by numerous models of participation in recreational sporting activities, including Gratton and Tice (1989), Kelly (1980) and (1989), Robinson and Godbey (1993), Ragheb and Tate (1993), Gratton and Taylor (1985), and Lawton (1994).

An important means, for the better understanding of the structure of recreational sporting activities, is participation data. It shows disadvantaged groups of participants in recreational sporting activities, and also gives the necessary information to management organisations and social institutions so that they can evaluate the effectiveness of their plans for

promoting physical recreation. For this reason, participation information for those investing in sport provision either in the public or private sectors is very important since, without this information, they cannot estimate potential demand and potential markets.

In its Sport for All Charter, the Council of Europe, states with respect to one aspect of leisure:

“Every individual shall have the right to participate in sport”.

Studies can take two forms: activity-based and time-based. Activity-based investigations use questionnaires to collect data on participation in specified leisure activities over a specified period of time. Time-based studies, like those of Szalai (1972) and Feldheim and Javeau (1977), sometimes called ‘time-budget’ or ‘diary’ surveys, record the start and finish times of activities, including simultaneous activities and sometimes location and company. As Cushman, Veal, and Zuzanek (1996) stated demographic and socio-economic information is usually collected as well.

2.2.1 Methodological Issues

Different measures of participation in recreational sporting activities appearing in the literature surveyed are as follows:

- Annual frequency (rarely, sometimes, often, and very often) participation (Stockdale et al., 1996), and frequency (more than four times, one to four times, and non-participation (Kelly, 1980). Also the Likert scale (very important, quite important, somewhat important, and not important) participation (Jackson, 1987; Jackson and Henderson, 1995).
- Frequency of participation in a two week period (Robinson and Godbey, 1993).
- The average number of sport activities undertaken annually (Boothby, Tungatt, Townsend, and Collins, 1981).

- Frequency of participation (percentage of respondent who took part in an activity) two weeks before the study (Robinson and Godbey, 1993).

Also the major source of national data on recreational sporting activities (the General Household Survey, Matheson, 1991) utilised four measures for participation in recreational sporting activities in England. These are as follows:

- Annual frequency of participation in terms of percentage of respondents who took part in an activity in the twelve months before the survey. This was first introduced in 1987, in an attempt to gain measures of participation in recreational sporting activities over a one year reference period, and eliminate seasonal variations.
- Frequency of participation during the four weeks before the survey (the average number of sessions of participation in a four week).
- Frequency of participation in four weeks before the study (the percentage of respondents who took part in an activity in the previous four weeks).
- Frequency of participation per adult per twelve months in terms of the average number of sessions of participation during the last twelve months before the study.

Chase and Harada (1984) pointed out that measurements of participation based on the above measures (period of time before the survey) have both advantages and disadvantages. For instance, measurement of participation based on the four-week period cannot reflect seasonal participation and infrequent participants. On the other hand they stated that measurements of participation based on the past twelve months before the survey may not always be reliable and accurate, because respondents may be unable to recall. Also they took the view that respondents usually exaggerate their frequency of participation. However, the vast majority of researchers in the field of constraints on participation in recreational sporting activity including Jackson (1987) utilised an annual participation rate (one year before the survey). According to Matheson (1991, see table 2.1) the annual frequency of participation is always higher than the four-week rate.

Table 2-1

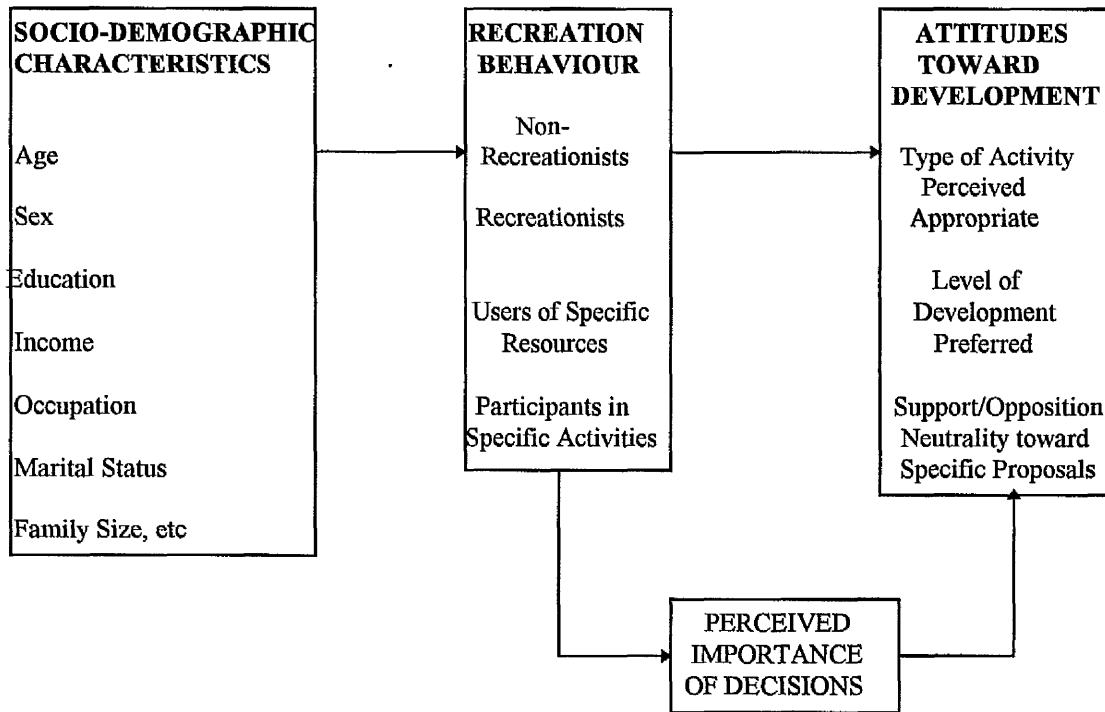
Patterns of Participation in Great Britain (Source: Matheson, 1991, page 13)				
	(a)	(b)	(c)	(d)
Walking	37.9	60.1	1.6	8
Snooker/billiards/pool	15.1	22.9	1.5	6
Swimming: outdoor	3.5	-	-	-
Swimming: indoor	10.5	34.6	-	4
Darts	8.8	15.4	1.8	6
Keep fit/yoga	8.6	14.3	1.7	9
Cycling	8.4	14.8	1.8	10
Athletic-track and field	0.5	2.0	4.0	5
Other running	5.2	10.5	2.0	7
Football	4.8	8.9	1.9	4
Weightlifting	4.5	8.2	1.8	8
Golf	3.9	9.2	2.4	4
Badminton	3.4	8.2	2.4	3
Squash	2.6	6.7	2.6	4
Table tennis	2.4	6.3	2.4	4
Fishing	1.9	5.8	3.1	3
Tennis	1.8	6.6	3.7	4
Tenpin bowling/skittles	1.8	5.7	3.2	2
Lawn carpet bowls	1.7	3.7	2.2	6
Cricket	1.2	4.2	3.3	3
Water Sports (excluding sailing)	1.1	4.7	4.3	3
Horse Riding	0.9	2.6	2.9	7
Self defence (excluding boxing)	0.8	1.7	2.1	7
Ice skating	0.8	3.7	4.6	2
Basketball	0.6	1.7	2.8	3
Sailing yachts/dinghies	0.6	2.5	4.2	3
Motor Sports	0.4	1.1	2.8	4
Rugby	0.4	1.1	2.8	5
Netball	0.4	1.4	3.5	3
Gymnastics	0.3	0.6	2.0	7
Boxing/wrestling	0.2	0.4	2.0	(7)
Hockey	0.2	0.3	1.5	(5)
Field sports	0.1	0.2	2.0	(7)
Climbing	0.1	0.2	2.0	(4)
Curling	0.0	0.2	-	(9)
Other	0.7	1.5	2.1	3
At least one activity (excluding walking)	44.7	61.9	1.4	-
At least one activity	60.7	77.6	1.3	-
Base = 100%	19529	19529		
(a) Participation rates in the 4 weeks before the survey				
(b) Participation rates in the 12 months before the survey				
(c) Ratio of annual/ 4 week participation rates b/a				
(d) Average number of occasions of participation in the last four weeks				

2.2.2 Socio-Demographic Variables in Recreational Sporting Activities

Participation in recreational sporting activities in general, participation in selected activities, and use of the resources were found to be associated with four socio-demographic variables, age, education, income, occupation, and family life cycle. However, generally recreation investigators understood that these variables may not fully illustrate frequency of participation, and also identified the fact that recreationists and participants in particular recreational activities can be recognised in terms of socio-demographic factors. According to Jackson (1980) one of the most consistent and influential variables is age, but income, education, sex, life satisfaction, and family size were also important. Lime and Stankey (1971) were of the opinion that relationships between demographic variables and recreational sporting activities have been widely utilised in the recreation literature, and the formulation of management objectives for recreational resources planning have been accepted by the participants. Jackson (1980) pointed out that interrelationships between variable sets are best visualised in simple diagrammatic form, as in Figure 2.1.

Figure 2-1

Interrelationships between Socio-demographic Characteristics, Recreation Behaviour, and Attitudes toward Development.



Recreational Development in Camrose, Alberta

Source: "Socio-Demographic Variables, Recreational Resource Use, and Attitudes Toward Development in Camrose, Alberta". Jackson (1980), *Leisure Sciences*, 3(2), 189-211.

2.2.3 Participation in Recreational Sporting Activities and Age

There is no doubt that life style is changed by age, and often limited by constraints such as reduced income and health problems referred to in McGuire (1984), lack of time and lack of money in Mannell and Zuzanek (1991), and also "lack of transportation" and "costs too much" in Hultsman (1993). According to Young and Willmott (1973), Jackson (1980) and Coalter, Dowers and Baxter (1995), age is one the most consistent and strongest factors in participation in sport. Gratton and Taylor (1985) and Jackson and Dunn (1991) concluded that participation in recreational sporting activities is influenced by age. They added that, there is a negative relationship between participation in recreational sporting activities and age in the recreation literature. This is related in data collected both from the General

Household Survey in England, referred to by Matheson (1991) Coalter et al. (1995) and from local surveys referred to by Boothby, Tungatt, Townsend and Collins (1981).

Several studies have shown how participation rates decrease in physical and sporting activities in terms of age in 1993-94. Table 2.2.shows rates of participation in terms of age. Analysis of the national data in England (1977-1987) by Gratton and Tice (1989) provided new information for the negative relationship between participation in sport and age. However, the same authors stated in 1994 that negative relationship between participation in sport and age may not always be accurate, because many older people were never participants, even when they were young. They also pointed out that participation is linked with the concept of sport literacy, since the younger generation is more active and has a much higher level of literacy than the older generation. They further proposed that in future the average age of participants in recreational sporting activities will increase and with greater participation by older people.

Table 2-2
Participation in Physical and Sporting Activities: by Age 1993-94

Great Britain	Percentages					
	16-24	25-34	35-44	45-59	60 & over	All persons
Activity						
Walking	49	55	56	55	44	51
Swimming	31	39	34	19	8	25
Team sports	29	18	17	11	6	15
Fishing	8	7	7	4	1	5
Other sports	28	23	22	16	6	16

Source: The Henley Centre

2.2.4 Young Adulthood and Education in Participation in Recreation Sporting Activities

According to Greene, Wheatley and Aldava (1992) there are four major life transitions, or transitional events, that happen to young people: attending university or beginning work,

marriage, parenthood, and leaving home. They also pointed out that it is obvious that young adulthood is a period of radical change. Hoff and Ellis (1992) pointed out that in recent years the number of young adults looking for post-secondary education has increased in the United Kingdom between 1990/91 and 1994/95 with the number of students enrolled in higher education increased by nearly 60 per cent and that for undergraduate courses, in 1994/95 there were around twice as many enrolments by men as in 1970/71 and four times as many enrolments by women (see table 2.3). They added that, when they attended university young adults benefit considerably from leisure activities because of the growth in the number of facilities, the new world of peers, teachers and experiences specific to undergraduates and the reduction in the number of constraints on participation.

According to Fasick (1988) "*university is a form of moratorium regarding identification with social institutions*". Rapoport and Rapoport (1975) stated that the university has provided a new environment and new facilities for leisure behaviour already selected by students.

Iso-Ahola and Buttner (1981) found that university students had a higher leisure ethic and a lower work ethic than high school students. Chang, Rosenthal, Bryant, Rosenthal and Heidlage and Fritzler (1993) discovered that university students are consistently more interested in the activities than high school students, suggesting that young adults have leisure interests which are distinct from those of high school students. According to Lindsay (1984) the higher participation in high school activities was related to higher participation in voluntary social activities as young adults. The author suggested that high school students who participate in extracurricular activities are more likely to be involved in a large range of social activities in their young adulthood. Roberts (1983) pointed out that university students enjoy freedom from parents, typically with the blessing of their elders, and learn to associate with equals without external supervision.

Hendry (1989) pointed out that three factors have affected whether young adults attend university or go on to work. The first is their earlier participation in obligatory and competitive activities during their high school years, the second is the fact that young adults' years are courting years, and the third is the fact that young adults have more freedom and particularly those who work have more money. However, Furlong, Campbell and Roberts (1990) disputed the fact that money is one of the most important factors which influence young adult leisure behaviour. These factors are related to both sexes. Berk and Goebel (1987) found that females showed a greater decline in participation in leisure behaviour than males from high school to university. The authors stated that:

In large, multipurpose university setting, where there is little external support in the form of direct encouragement for scholarship and leadership, students must rely on earlier developed internal supports. If females are more dependent on external supports than are males, this may account for their disadvantage during college as their advantage during high school (p, 482).

All studies that have measured how young people's uses of leisure are organised into 'factors' or 'lifestyle clusters', have found that the factors are linked to, or that the clusters cluster within gender and social class groups. Hollands (1995), in the study of Newcastle night life, found that students and local young people were equally involved in the city centre scenes. In their longitudinal investigation among a much larger sample of young people in Scotland, Hendry et al. (1993) were able to distinguish a number of lifestyles, all of which tended to draw their members from specific social classes.

It is evident that the transition to university or work may have implications for leisure behaviour. Roberts (1997) whilst he notes that there have been important changes in British youth cultures in recent years argues that, contrary to claims that have been made in debates about a post-modern condition, the changes do not include leisure or consumption based

lifestyles now acting as foundations for identity formation. He pointed out that the available evidence suggests that even following all the recent changes in their situations, young people do not need leisure based lifestyles to create identities for themselves. They are still able to build identities from the customary materials—sex, sexuality, social class, and also, in some cases, nationality, religion and ethnicity.

Table 2-3

Enrolments in Higher Education: by Type of Course and Gender

<i>United Kingdom</i>		<i>Thousands</i>			
		1970/71	1980/81	1990/91	1994/95
Higher education					
Undergraduate- Full time					
	Males	241	277	345	513
	Females	173	196	319	511
-Part time					
	Males	127	176	193	210
	Females	19	71	148	273
Postgraduate - Full time					
	Males	33	41	50	74
	Females	10	21	34	56
-Part time					
	Males	15	32	50	92
	Females	3	13	36	84

1) Home and overseas students. Excludes adult education centres. Includes Open University for higher education and for 1980/81.

Source: Department for Education and Employment: Welsh Office: The Scottish Office Education and Industry Department: Department of Education, Northern Ireland

Gratton and Tice's (1991) analysis of the data of the General Household Survey based on an analysis of the national data in England (Sport Council, 1977), showed that educational

institutions have been strongly influenced towards participation in recreational sporting activities. This view was further supported by Torkildsen (1992) who analysed data based on the 1983 General Household Survey and concluded that educational attainments were related to a large extent to participation in sporting activities. However, Lindsay and Olge (1972) found that people who have higher education standards have a relatively higher level of recreational participation than people of low education.

Coalter, Dowers, and Baxter (1995) found that there is strong relationship between education and participation in recreational sporting activities. They provided evidence based on a secondary analysis of the 1990/91 data in the General Household Survey. The conclusions of their investigation were as follows:

- a) The relationship between education and participation in recreational sporting activities was highly significant.
- b) Particularly those who were in full time education (age 18+ and 16-17), such as undergraduate students, had the highest participation rates.
- c) Also within the peer group (16-17 years), those who were in full time education had the highest participation rates in all activities.

As previously mentioned, this positive relationship between education and participation in recreational sporting activities may relate to the student life style, the time available, and the facilities and opportunities which were provided by the institutions involved. According to Chalip, Csikszentimihalyi, Kleiber and Larson (1984) most significantly, recreational sports provide a forum for feeling effective in relation to the demands of the environment. As Coalter et al (1995) suggested future participation in recreational sporting activities by those undergoing education will be the strongest predictor of participation rates and may decrease the overall age of participation because of increasing number of people entering further and higher education. As previous studies by White (1975) Vaux (1975) Wong

(1978) Kroening (1979) and Jackson (1980) have shown, the level of both education and income are more likely to affect the level of participants in recreational sporting activities

2.2.5 Participation in Recreational Sporting Activities and Gender

In recent years, investigation has focused on gender inequality, since inequality between men and women in leisure has increased. As pointed out in studies by Talbot (1979) Wimbush (1986) Deem (1986) Shaw (1986) Dixey (1988) Wearing and Wearing (1988) Wimbush and Talbot (1988) Green, Hebron and Woodward (1990) Henderson (1991) Hargreaves (1995) Measor, Tiffin and Fry (1995) and Carroll (1995), both gender roles and gender relations were explained by this inequality

Hargreaves (1994) and Messner and Sabo (1990, 1994) revealed that there is a correlation between the gendered nature of sporting activities and gendered ideas about masculinity, femininity, sexuality, and the use and representations of the physical body. As Talbot (1995) stated:

“... equal opportunity in physical education is not merely a matter of ‘girls measuring up to boys’, or boys being able to dance: it is genuinely valuing the different and individual contributions of all children, being willing to challenge sex and gender stereotypes, and teachers being able to recognise the influences of their own behaviour and attitudes, and being able to change them when necessary to ensure that children’s choices are kept free and open”.

Carrington, Chivers and Williams (1987) pointed out that, although investigation into gender differences in leisure opportunities and behaviour has increased in the United Kingdom, little is known about the extent to which such differences are changed by ethnicity. This has also been neglected in Iran.

Investigations conducted in both the United States of America by Howard (1992) and Robinson and Godbey (1993) and in England by Matheson (1991), Coalter, Dowers and

Baxter (1995) and Church (1997) show that the number of women who take part in sporting activities is considerably less than men. According to Coalter et al. (1995) and Church (1997) factors such as age and social class influenced participation and non-participation in sporting activities more than gender. Running, golf, and weight-training were major male-dominated activities, whilst keep fit and yoga were the only activities found to be female-dominated. Still walking a distance of two or more miles has remained the most popular physical activity between 1987 and 1994 for both men and women in Great Britain (see Table 2.4).

Table 2-4
Participation in the Most Popular Sports, Games and Physical Activities: by Gender
%

	Males			Females		
	1987	1990/91	1993/94	1987	1990/91	1993/94
Walking	41	44	45	35	38	37
Snooker/pool/billiards	27	24	21	5	5	5
Swimming	..	14	15	..	15	16
Cycling	10	12	14	7	7	7
Darts	14	11	9	4	4	3
Soccer	10	10	9	-	-	-
Golf	7	9	9	1	2	2
Weightlifting/training	7	8	9	2	2	3
Running	8	8	7	3	2	2
Keep fit/yoga	5	6	6	12	16	17
Tenpin bowling/skittles	2	5	5	1	3	3
Badminton	4	4	3	3	3	2
At least one activity	70	73	72	52	57	57

1) Percentage aged 16 and over participating in each activity in the four weeks before interview.

2) This may include those activities not separately listed.

Source: General Household Survey, Office for National Statistics

Many surveys in the United States of America such as those by Howard (1992) and Robinson and Godbey (1993), have concluded that the participation of women in sporting activities is less than men, and also indicated that the difference in participation in sporting activities between the genders tends to wider rather than narrow. However, Gratton and Tice (1994) and Church (1997) believed that in England, in recent years, the differences between men's and women's participation in sporting activities has decreased (see Table 2.4).

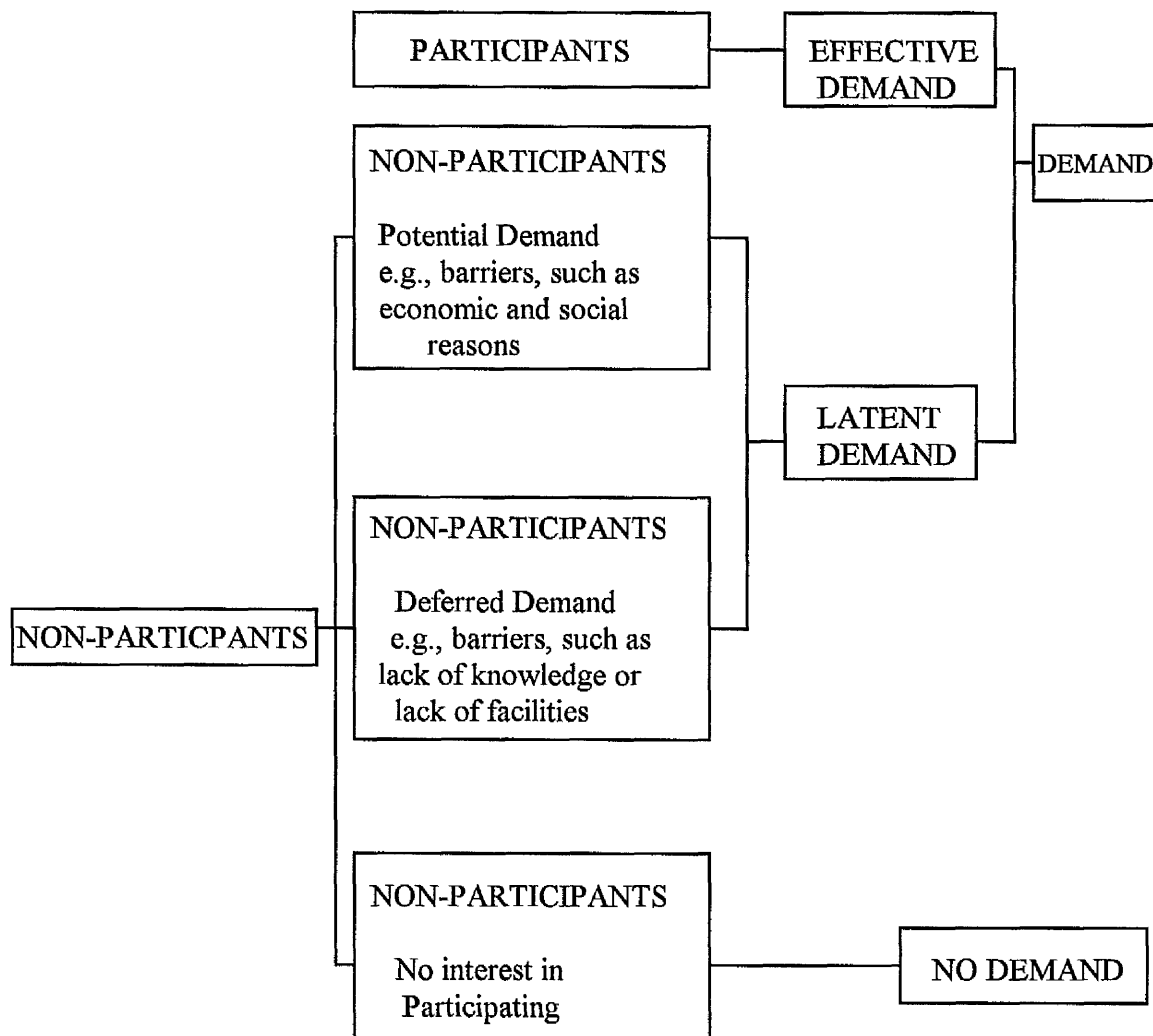
2.2.6 Participation in Recreational Sporting Activities and Socio-economic Status

Previous investigations by Howard and Crompton (1980), Godbey (1985) and Searle and Jackson (1985a) have suggested that participation in recreational sporting activities related to socio-economic status and level of education. This view was supported by Matheson (1991) who, based on an analysis of information from the General Household Survey (1987), revealed a strong relationship between socio-economic status and participation in sporting activities. However, he also showed that, in general, higher socio-economic status was associated with a higher level of education. This argument was supported by Raymore, Godbey and Crawford (1994), who were of the opinion that the negative relationship between participation in recreational sporting activities and level of education might suggest that the relationship between participation in recreational sporting activities and level of socio-economic status might be an indirect one. This view was supported by Coalter et al. (1995), who revealed a significant relationship between level of education and socio-economic status. Gratton and Taylor (1995) took the view that further empirical research should be undertaken into ways in which sporting activity agencies and organisations (universities) can improve the delivery of programmes and services. They added that this might be used by managers particularly in relation to individual activities, facilities, and types of user. Finally, they recommended the development and use of a satisfactory management data system, including market research data.

2.3 The Models of Aspects of Demand, Participation and Non-Participation

In general, most public agencies seek to encourage non-participants to use existing resources. Romsa and Hoffman (1980), Wall (1981), Searle and Jackson (1985b) and Jackson (1993) among others have identified non-participants as people who do not participate in recreational sporting activities because of latent demand, and their research has shown that many aspects of non-participation can be related to the system of leisure decision-making. According to Jackson and Dunn (1988) latent demand has been defined as non-participants, but not all non-participants can be defined as latent demand. Some people who do not desire to participate (no demand) for an activity should be classified in another group of non-participants. The basic concepts of latent demand were defined by Wall (1981) but Jackson and Dunn (1988) and Wright and Goodale (1991) attempted to make a further distinction as follows: (1) effective demand: people who participate in an activity, and (2) latent demand: people who would like to participate in an activity but for some reason are unable to. Latent demand itself was further divided into: (a) potential demand: people who do not participate because of social circumstances and lack of money, and (b) deferred demand: people who do not participate for reasons such as unawareness and lack of facilities. People representing latent demand (potential and deferred demand) are included in categories of non-participants. In addition, Jackson and Dunn (1988) suggested that lack of interest is a reason why many people do not participate in an activity. Thus, these three categories, effective, latent and no demand are shown in Figure 2.2 as follows:

Figure 2-2
Participation, Non-Participation and Demand



Source: "Integrating Ceasing Participation With Other Aspects of Leisure Behaviour"
Jackson & Dunn (1988). *Journal of Leisure Research*, 20, 31-45.

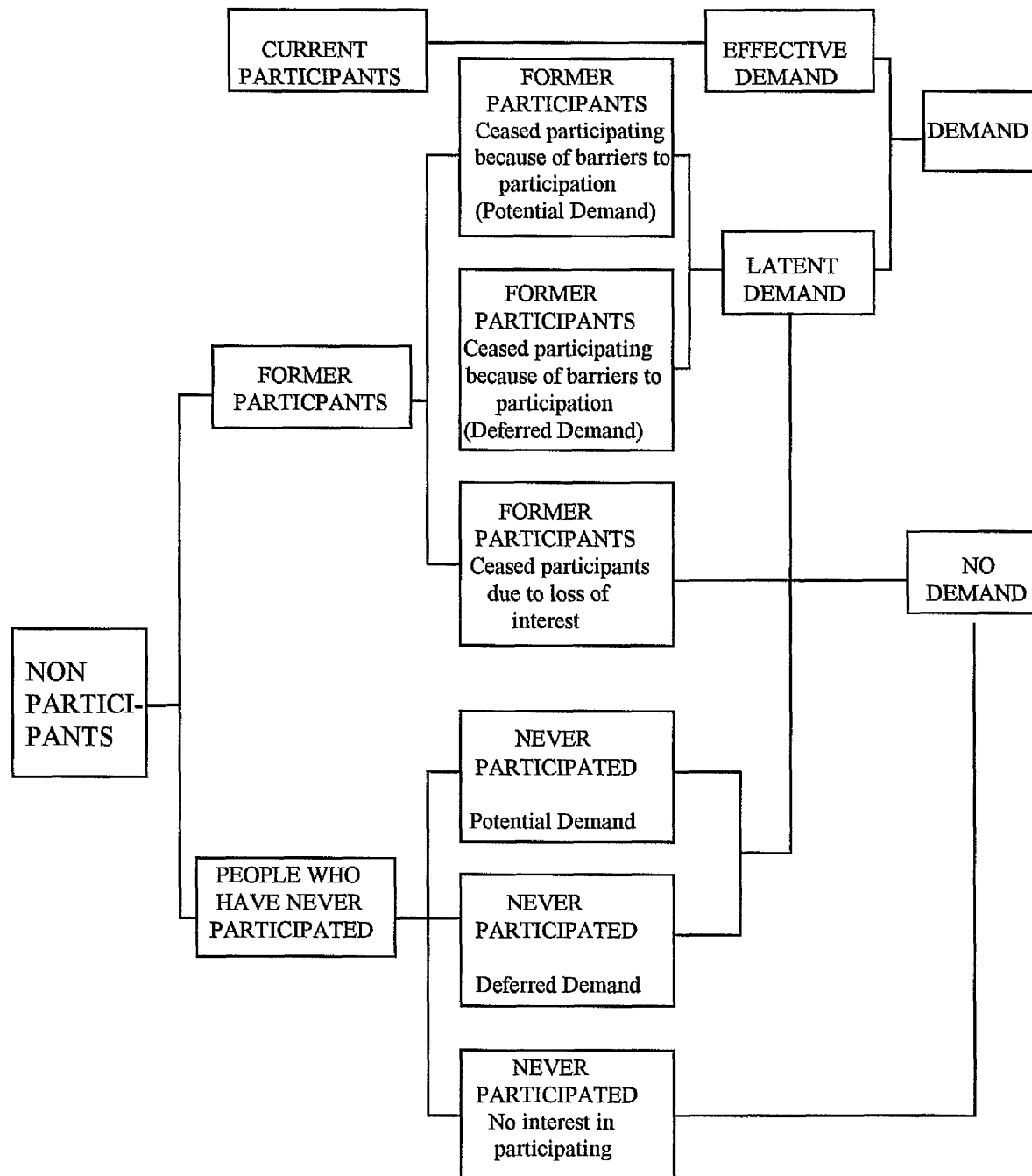
- The participants (effective demand).
- The non-participants who would like to participate but for some reason are unable to (latent demand).
- The non-participants who are not interested in participation (no demand).

Another model of demand proposed is that of ceasing participation in general, which involves particular sub-groups of former participants. Jackson and Dunn (1988) suggested

this model in order to integrate into aspects of non-participation, the barriers to participation identified by Wall and others (Figure 2.3). As noted by Jackson and Dunn (1988), non-participants can be sub-divided into four categories or sub-groups, by further sub-dividing them according to whether their non-participation is due to certain barriers (latent demand) or loss or lack of interest (no demand), and into those who have never participated and those who are constrained from participating. Thus the model has been developed to reflect six sub-categories of non-participation as follows (see Figure 2.3):

Figure 2-3

Participation, Ceasing Participation, Non-Participation and Demand

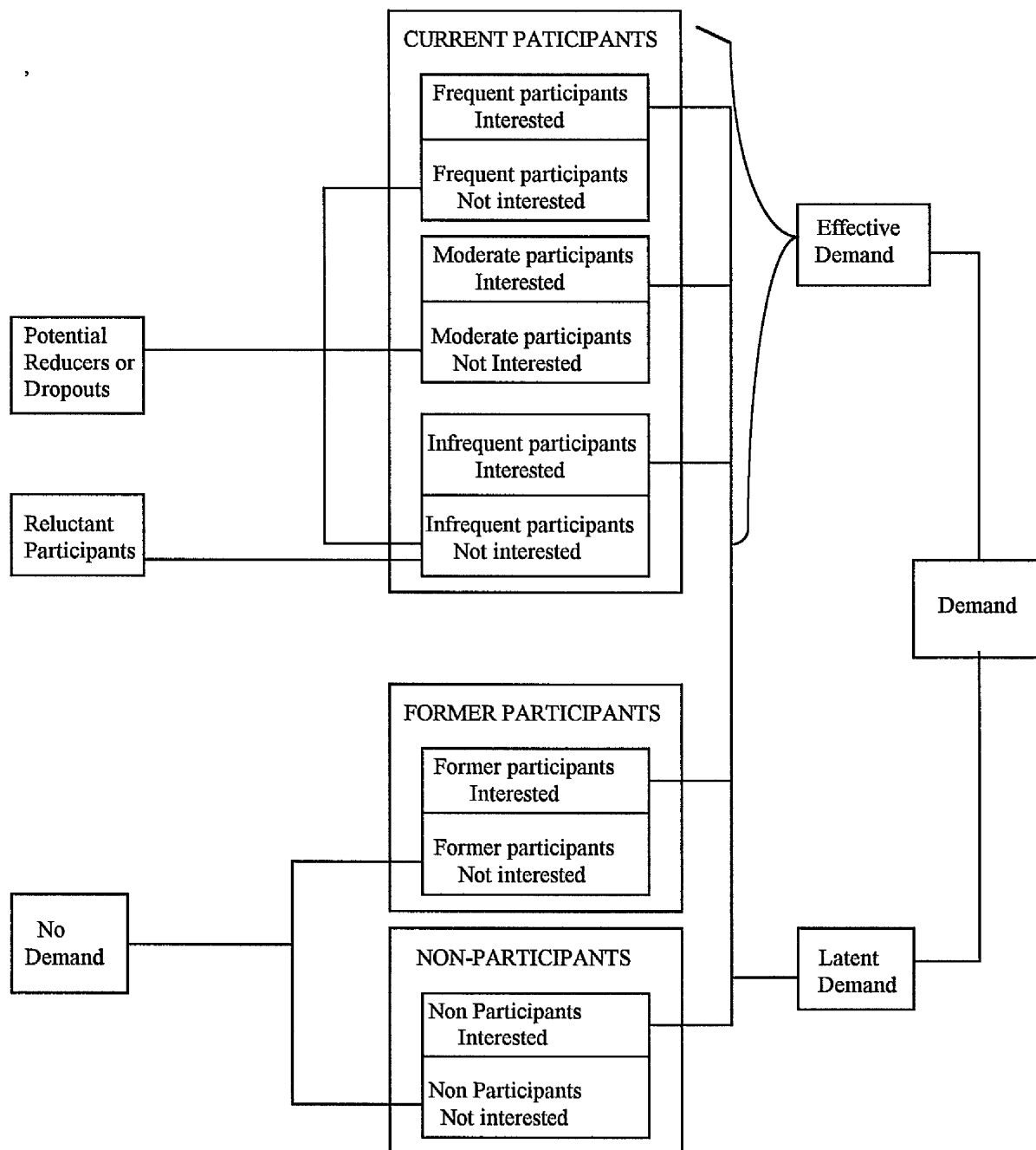


Source: "Integrating Ceasing Participation With Other Aspects of Leisure Behaviour"
Jackson & Dunn (1988). Journal of Leisure Research, 20, 31-45.

- Frequent participation (Interested in additional participation)
- Frequent participation (Not interested in additional participation)
- Moderate participation (Interested in additional participation)
- Moderate participation (Not interested in additional participation)
- Infrequent participation (Interested in additional participation)
- Infrequent participation (Not interested in additional participation)

Wright and Goodale (1991), based on Jackson and Dunn 's (1988) model, developed the idea that the participant group (effective demand) is too generic and heterogeneous a category, and should be sub-divided further. Two bases were utilised for this sub-division, firstly, frequency of participation and secondly, interest in additional participation. The authors observed that the number of categories of frequency can vary according to the nature of the specific investigation. They suggested that perhaps three categories would be appropriate for investigations and their models reflected three participant groups in terms of frequency, with each category further sub-divided according to the interest in additional participation. Thus, six groups were reflected in their model (Figure 2.4):

Figure 2-4
Typology of Participant and Non-Participant Groups



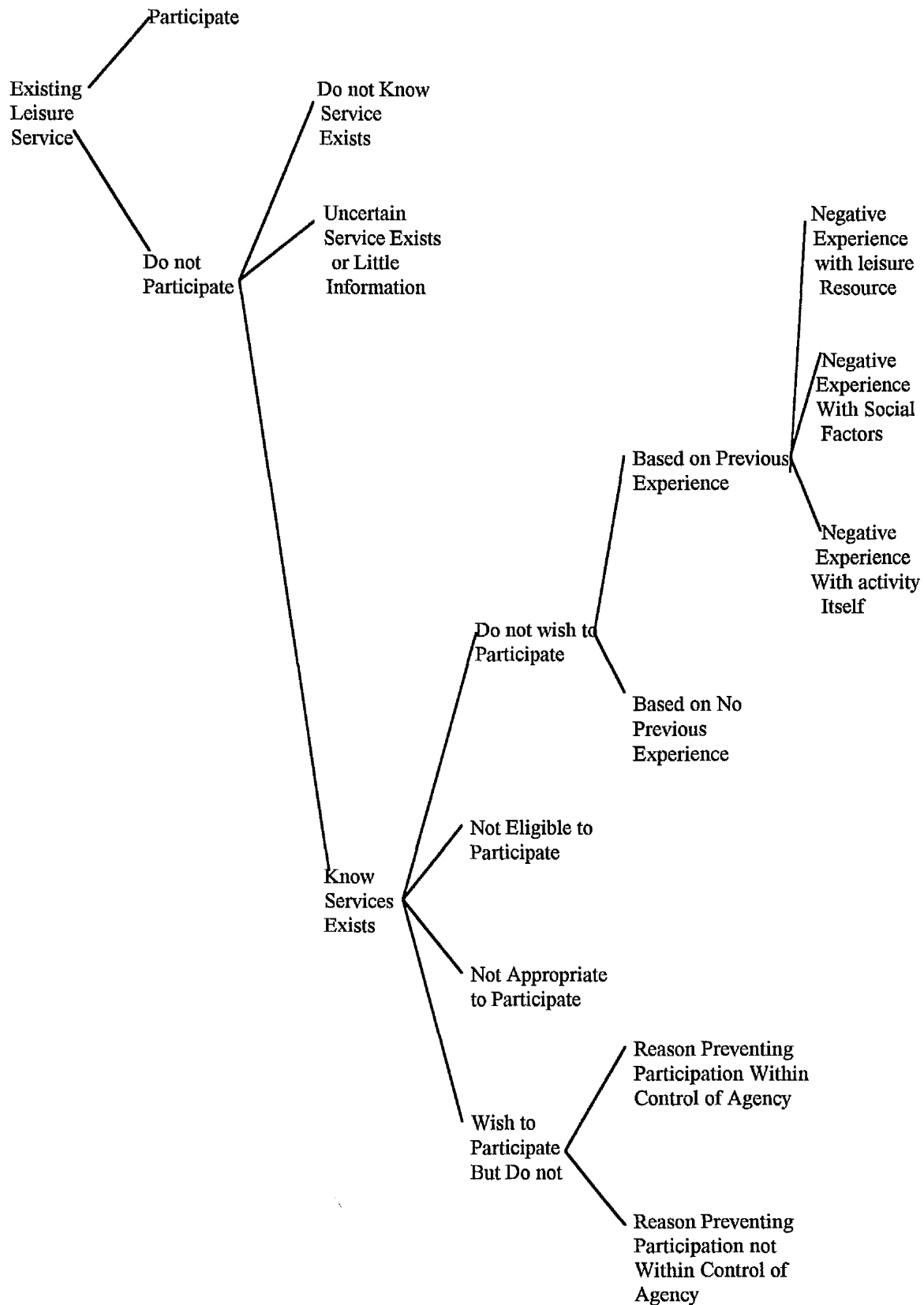
Source: "Beyond Non-Participation: Validation of Interest and Frequency of Participation Categories in Constraints Research"
 Wright & Goodale (1991), Journal of Leisure Research, 23, 314-331.

Their models of aspects of demand, participation and non-participation were based on frequency of participation and interest, in which participants' latent demand expressed a

desire to increase the frequency of their participation. These models indicated that neither participants nor non-participants are homogeneous groups. The same authors also took the view that interest is significantly influenced by frequency of participation and can be further divided by reference to frequency of participation and interest in additional participation. Finally, they argued that some effect on substitutability can be expected.

Godbey (1980) pointed out that there are more models in relation to participants and non-participant groups (particularly prior to those models already explained) such as the model of non-participation in leisure services. He developed this model further in Godbey (1985) which was based on leisure “need” or “demand” and focused on the information level of potential users in regard to the leisure services that existed (Figure 2.5). Non-participants were divided into three categories: (a) those who knew a service existed, (b) those who were unaware about a facility or who had a little information but not enough to use it, (c) those who did not know that the service existed. Those who were aware of the existence of the service were further divided into: (a) those who did not wish to participate; (b) those who wished to participate but did not; (c) those for whom participation was unsuitable; and (d) those who were not eligible to participate. The author concluded that, whilst any such categorisation is judgmental, it is evident that perhaps sometimes the nature of the facilities caused non-participation. For example, a poorly maintained site, too high fees and charges, unawareness, and inconvenient hours of operation of the facilities are factors which an agency could change, while reasons like lack of time or dislike of other users at the site would be more difficult to alter, because they are not within the control of the agency.

Figure 2-5
A Model of Non-Participation in Leisure Services



Source: "Non-use of Public Leisure Services: A Model"
 Godbey, G. (1985), Journal of Park and Recreation Administration, 3(2), 1-12.

2.4 Leisure Constraints Factors on the Sporting Activity

According to Crawford and Godbey (1987) the themes of leisure constraints and the extent of participation in leisure activities have been of growing interest to investigators, with the consequence that there has been a concomitant increase in the related literature. This literature has indicated that any factor which inhibits a person's ability to participate in leisure activities can be defined as a constraint. The concept of constrained leisure has emerged in the leisure studies literature, where there has been an emphasis on the type of leisure constraints and the extent to which they act as barriers to participation in recreation activities.

The vast majority of these studies have been conducted in North America, Canada, and England and none in Iran. Such investigations have presented a diversity of methodological procedures.

2.4.1 Definitions of Barriers and Constraints

Barrier: *The term of "barrier" generally refers to "any factor which intervenes between the preference for an activity and participation in it" (Crawford and Godbey, 1987, p. 120).*

Constraint: *If a factor limits or inhibits participation in a given leisure pursuit, it may then be termed a constraint. A constraint has been defined as "a subset of reasons for not engaging in a particular behaviour" (Jackson, 1988, p. 69)*

Raymore, Godbey and Crawford (1994) pointed out that a variety of different definitions of constraints and barriers have been utilised, though sometimes these were considered as having the same meaning. However, many researchers have referred to "barriers," rather than constraints to participation in sporting activities, even though, according to Crawford, Jackson and Godbey (1991), constraints have the potential to influence preference in addition to participation. According to Raymore et al. (1994), "constraint" has a wider meaning than "barrier", in that constraints are not seen as being absolute, since they can potentially be overcome or reduced, whilst barriers prevent participation.

Jackson and Dunn (1991) and Jackson (1991b) pointed out that because constraints (a more comprehensive term than barriers) influence people's leisure in a variety of ways and not just at the stage of participation, the term "constraint" should be preferred.

2.4.2 Conceptual Classification of Constraints

There has been an attempt to develop methodologically, theoretically and conceptually sophisticated models of leisure constraints over the past decade. A good example is the study by Crawford, Jackson and Godbey (1991). A number of classifications have been utilised in the related literature.

Crawford and Godbey (1987) Henderson, Stalnaker and Taylor (1988) and Jackson (1990b) developed and conducted studies within different conceptual models of leisure constraints. Some authors have acknowledged a need to examine the operation of and relationship between forms of constraints. The most commonly utilised concept to have been found is the distinction between "internal" and "external" constraints, i.e., "individual" (personal) versus "environmental" (social) characteristics. Francken and Van Raaij (1981) have divided constraints into "internal" ones, such as personal capacities, abilities, knowledge, and "external" ones, including such things as lack of funds, lack of time, lack of facilities and geographical distance.

The concept of internal and external constraints has also been identified by Jackson and Searle (1985) and Searle and Jackson (1985a).

Boothby, Tungatt and Townsend (1981) suggested that personal constraints (physical ability and interest) were internal ones and social constraints (time, money, access to facilities) external ones. They added that internal constraints perhaps influence external constraints. For instance, "lack of ability", an internal constraint may be symptomatic of the effect of an external constraint like lack of facilities at which a skill may be acquired.

Similarly lack of facilities may be reported as a constraint when non-participants actually

wish to acquire skill in a specific activity. However, according to Jackson (1988), the division of constraints into internal or external ones is not an easy task. In this connection, it should be noted that the allocation of constraints to neither internal nor external categories has been identical in the various investigations.

For instance, many researchers considered lack of money and time as internal constraints, whilst some, such as Francken and Van Raaij (1981), treated them as external constraints.

According to Godbey (1985), it is possible to subdivide people who wish to participate, by reference to whether their non-participation is due to factors controlled by an agency (e.g., site hours of operation inconvenient), or whether it is due to factors over which the agency has little control (e.g., the individual lack of time to participate). Along the same lines, Howard and Crompton (1984) acknowledged that constraints can be identified by classification and that this can help managers as the constraints identified are within their dominion. Their classifications were related into internal constraints (motivational such as social/ psychological) and external constraints (physical such as facilities).

Jackson and Searle (1985) suggested another conceptualisation of constraints according to which they were categorised as either “blocking” or “inhibiting”. Blocking constraints are *“those which absolutely preclude participation”*, whilst inhibiting constraints are *“those which merely serve to inhibit the ability to participate to a greater or lesser extent, depending on circumstance”* (p. 698). They further pointed out that, whilst a distinction has been made between “blocking” and “inhibiting” constraints, which category a constraint falls into may vary from person to person. In the case of such a factors as availability of partners, for example, lack of partnership is a blocking constraint for a person who wants to play tennis, but the same constraint might be an inhibiting one for a person who wants to go running.

For this reason, Boothby, Tungatt and Townsend (1981) utilised the terms “relative” and “absolute” so that they saw constraints as exhibiting different degrees of variability-stability. Iso-Ahola and Mannell (1985) suggested the same distinction, using the terms “permanent” and “temporary”, so that, according to them, constraints were divided into six major categories or sources, one-half of which were determined as fairly stable and permanent and the other half as variable and temporary.

2.4.3 Constraints Models

Different conceptual models have been examined in the field of leisure constraints. For instance, Jackson and Searle (1985) recognised the distinction between various aspects of non-participation and various types of barriers to participation. They developed White's (1961) decision-making model of response to flood hazard, in which he tried to explain and understand a completely different kind of behaviour to recreation activity. Their model was a decision-making one, developed to overcome problems associated with the conceptualisation and measurement of non-participation and constraints to participation. It was constructed to explain a similar process of decision-making with respect to the selection of recreational activities from a broad range of such activities. The range of choice was divided into the theoretical range, the practical range, and the actual range. The theoretical range of choice included all aspects of recreational activities; this was restricted to the practical range of choice through the effect of blocking barriers. Only two blocking constraints, “lack of interest” and unawareness of the activity could be included in this model, because the precise nature of others may vary from person to person. Both theoretical and practical activities were included in the actual range of choices in which an individual participates (P in Table 2.5), whilst some activities are rejected for a diversity of reasons (NP1 to NP5 in Table 2.5). Then, choices are blocked (X in Table 2.5), and the

practical or open range of choice (O in Table 2.5) is further limited by a series of inhibiting constraints, which may be internal or external to the individual. However, as mentioned before, based upon White's model, all aspects of non-participation have already been defined in the proposed model, as follows:

NP1= non-participants who wished to participate, but could not because of internal constraints.

NP2= non-participants who wished to participate, but could not because of external constraints.

NP3= individuals who were considered to have no interest in participating.

NP4= individuals who could not participate due to unawareness of the possibility of access to facilities.

NP5= individuals whose participation was completely blocked by the affect of one or more elements other than those recognised in NP3 and NP4.

Table 2-5
A Decision Making Model of Recreation Behaviour

Theoretical Range of Activities	Blocking Barriers			Practical Range of Activities	Inhibiting Barriers						Actual Rang of Activities
	Interest	Awareness	Other		EB1	EB2	EB3	IB1	IB2	IB3	
T1	O	O	O	P1	+	+	+	+	+	+	P
T2	O	O	O	P2	+	+	+	+	+	+	P
T3	O	O	O	P3	+	+	+	-	-	-	NP1
T4	O	O	O	P4	-	-	-	+	+	+	NP2
T5	X	O	O								NP3
T6	X	X	O								NP4
T7	O	O	X								NP5
Tn	O	O	X								NP5

X = Blocked Choice + = Favourable to choice EB = External Barrier P = Participation
O = Open Choice - = Unfavourable to choice IB = Internal Barrier NP = Non-Participation

Source: "Recreation Non-Participation and Barriers to Participation: Concepts, and Models". Jackson & Searle (1985). *Loisir et Society/ Society and Leisure*, 8(2), 693-707.

The same authors draw attention to the fact that some of the aspects of non-participation such as ceasing participation and barriers to enjoyment are clearly presented in the model, because the model is complicated and difficult to confirm empirically. However, they

identify the problems of analysing participation and non-participation in recreational activities as follows:

- (1) the diversity of aspects of non-participation have been distinguished and it has been indicated how they are related to different types of barriers.
- (2) the distinction between two types of constraints (blocking and inhibiting) has been made clear by Goodale and Witt (1989).
- (3) finally the adoption of the model may lead to a new perspective of participation in recreation, which views participation as a decision-making process.

Iso-Ahola (1981) suggested a unique conceptual model of constraints to leisure participation which was expanded by Iso-Ahola and Mannell (1985). This model proposed the individual in a social environment but did not indicate the process by which constraints may work beyond the individual. The aim of the model was to answer three questions: (1) what are the causes or the sources of constraints? (2) What are the types? (3) How permanent or temporary are they? Also, the constraints were divided into six categories or resources, most of which conformed to classifications utilised by previous investigations. Three categories of these constraints were considered as fairly stable and permanent and the other three as more variable and temporary.

Crawford and Godbey (1987) suggested a relationship between leisure preference and participation in which the importance of leisure constraints was indicated. This model has been presented as follows:

- (a) some constraints may intervene between leisure preference and participation, since, for some reason, individuals have no chance to participate.
- (b) some intervening constraints may make individuals take part in leisure activities which perhaps they do not like.

- (c) preference and constraints may have been confused in the assessment process. For example Romsa and Hoffman (1980) noted that lack of interest was a constraint to participation.
- (d) the investigation can be conducted by reference to various types of constraints which may be confused. For instance, Francken and Van Raaij (1981) distinguished between internal and external constraints, but did not progress to interpersonal processes.
- (e) an individual's leisure preferences may be more significantly unstable than is normally presumed. For instance, an individual's psychological state (e.g., anxiety, stress, fatigue, depression) may influence his leisure preferences.

They, therefore, took the view that the constraints are influences upon leisure behaviour, not determinants of it. They further concluded that leisure behaviour is more likely to be predicted by reference to the relative strength of constraints vis-a vis preference and that, if preference is significantly greater than perceived constraints, then despite these, the individual might participate in the activity.

Jackson, Crawford and Godbey (1993) suggested the idea of the negotiation of constraints which they conceptualised as the negotiation proposition. They believed that strength of motivation related to preference was a fact which might have some effect on the perception of constraints.

Crawford and Godbey (1987) were of the opinion that constraints can be understood within the broad context of a leisure preference participation relationship. They made the first systematic attempt to classify leisure constraints into three categories, by reference to the way they influence preference and participation. These categories were:

1. **Intra-personal constraints:** "... involve individual psychological states and attributes which interact with leisure preferences rather than intervening between preferences and participation" (p. 122) (Figure 2.6 B).

Crawford, Jackson and Godbey (1991) added the notion of 'psychological orientation' to Crawford and Godbey's (1987) earliest definition of intra-personal barriers. They extended the definition by stating that the psychological orientation comprised at least three subjective evaluations: a) the beliefs a person has about what he or she and others ought to do; b) what the individual likes or wants to do; and c) the extent to which the person has the competence, or the ability to perform a particular behaviour (p. 314).

Examples of intra-personal constraints are stress, anxiety, depression, religiosity, perceived self-skill and subjective evaluations of the appropriateness and availability of various leisure activities.

2. Interpersonal constraints: *"... are the result of interpersonal interaction or the relationship between individuals' characteristics. These constraints are either the product of the intra-personal barriers which accompany spouses into the marital relationship, thus affecting joint preference for specific leisure activities, or those barriers which arise as the result of spousal interaction. Barriers of this sort may interact with both preference for, and subsequent participation in, companionate leisure activities (p. 123) (Figure 2.6 C).*

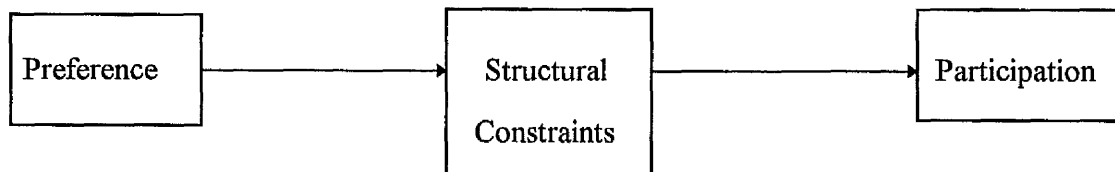
Interpersonal constraints is the term given to individual barriers such as lack of a partner and peer group. This is when a person is unable to find a partner to engage in a particular activity, possibly due to dissimilarity of preferences, different time-table and skill levels, and so on. While, sometimes, there is a high similarity between preference, it may be that the general socio-emotional tone of a marital relationship may serve as a constraint to joint or family leisure. For instance, it can be that the frequency of conflict in a spousal relationship other than in relation to leisure activities may become a powerful constraint to spousal interaction in general. In addition, a parallel situation may occur in the parent-child relationship within the family system. The authors thus focused on constraints to family leisure caused by conflict between the members of a family. However, they also suggested that lack of a partner may be a more significant interpersonal constraint for individuals who want to participate in leisure activities such as tennis and basketball.

- 3. Structural constraints:** *"... represent constraints as they are commonly conceptualised, as intervening factors between leisure preference and participation"*
(p. 124) (Figure 2.6 A).

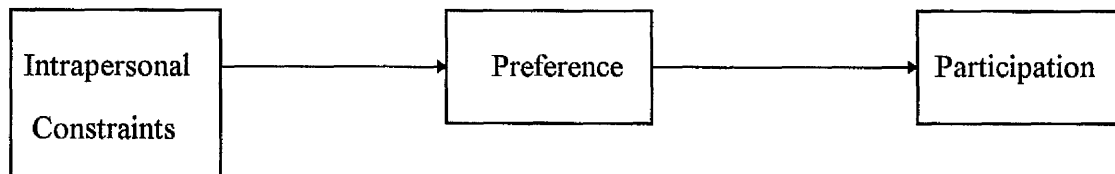
Structural constraints include such things as the environment, financial resources, availability of opportunities, work timetable, and reference group attitudes regarding the appropriateness of certain activities.

Figure 2-6
A Model Based on the Preference and Participation Relationship

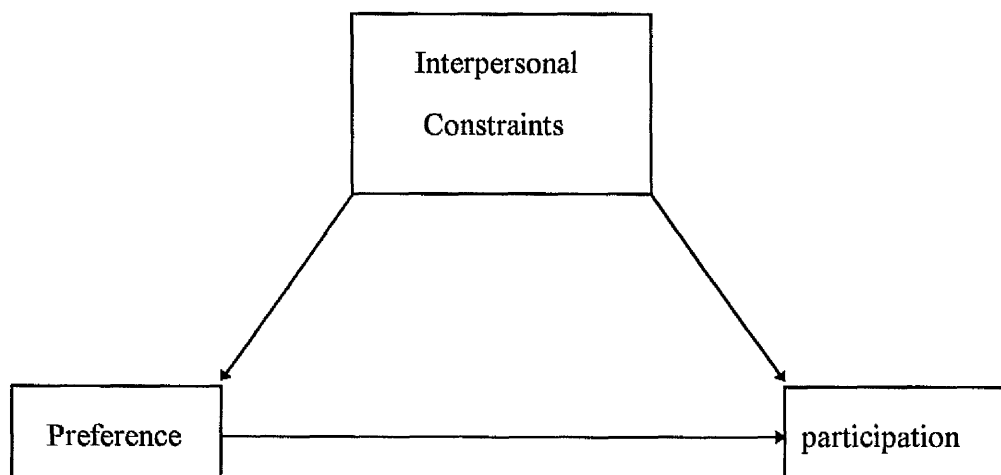
A



B



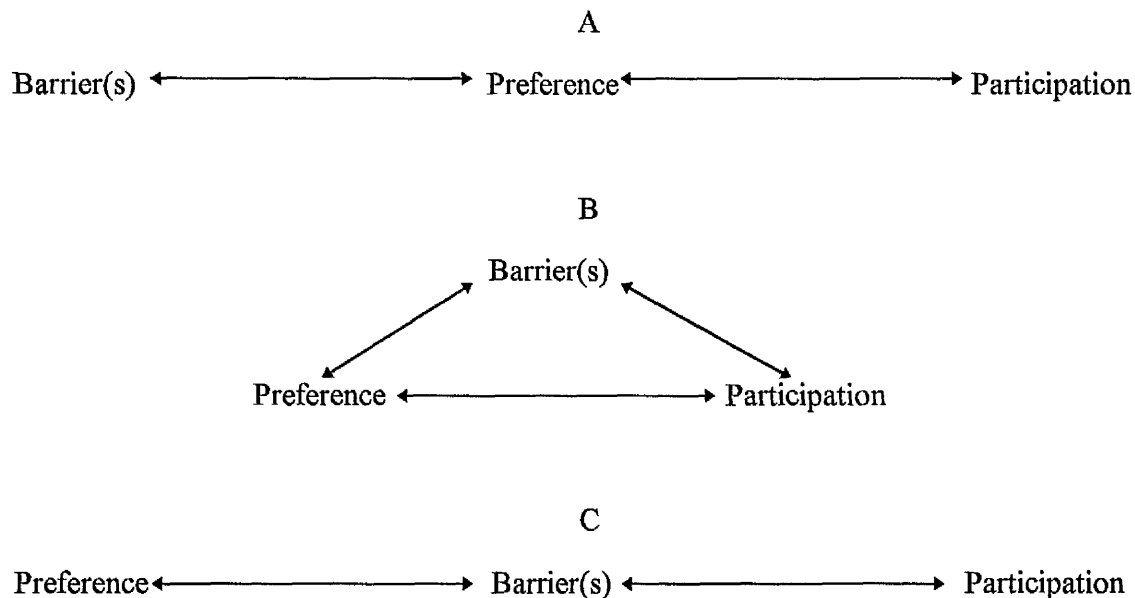
C



Source: Adopted from "Reconceptualising Barriers to Family Leisure"
Crawford & Godbey (1987), *Leisure Sciences*, 9, p. 123-124.

According to Crawford and Godbey (1987), intervening variables are traditionally located within the context of the leisure preference-participation relationship. They suggested that the conceptualisation of leisure constraints examined reflects only one of the ways in which constraints may be related to preferences and participation. Their model developed and demonstrated the other kinds of constraints on leisure, which they divided into three types: a) intra-personal constraints, which form an important relationship between preferences and participation (Figure 2.7 A), b) interpersonal constraints, which indicate a relationship with both preferences and participation (Figure 2.7 B), and c) structural constraints, where a preference already existed, perhaps through satisfying previous participation in the activity (Figure 2.7 C).

Figure 2-7
A Model for Preference-Participation-Relationship



Source: "Reconceptualising Barriers to Family Leisure"
Crawford & Godbey (1987), *Leisure Sciences*, 9, p. 123-124.

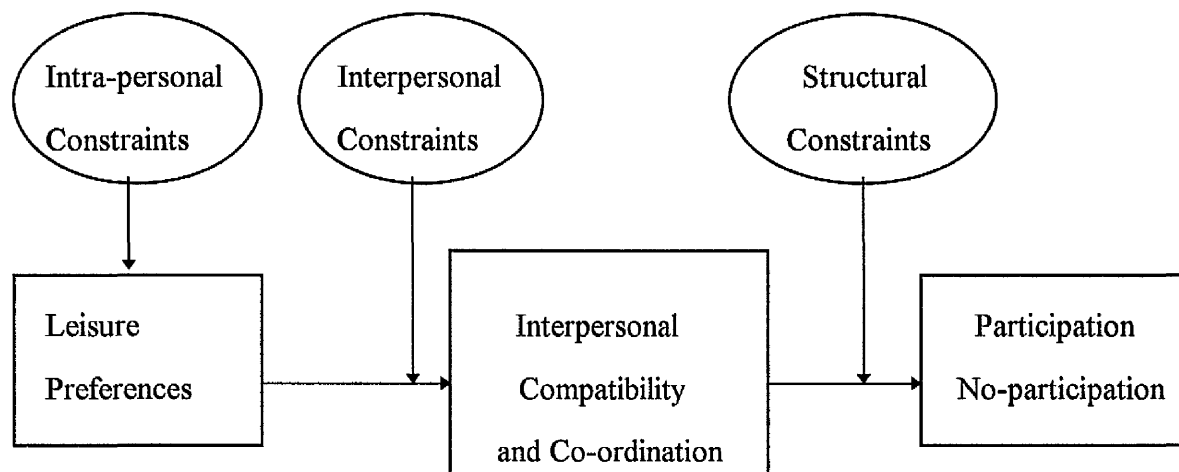
Crawford, Jackson and Godbey (1991) developed these three discrete dimensions into a single model of constraints interacting within a sequential hierarchy from preferences to

participation. Their proposed model is based on a hierarchical decision making process and a hierarchy of experienced constraints. It moves from proximal constraints, which affect preferences, to distal constraints, which influence participation. Each level of constraints must be overcome in order for an individual to face the subsequent level of constraints.

Their proposed hierarchy of importance (see Figure 2.8) is as follows:

- 1) **Intra-personal constraints:** *“Leisure preferences are found ... when intra-personal constraints ... are absent or their effects have been confronted through some combination of privilege and exercise of the human will”* (p. 313).
- 2) **Interpersonal constraints:** *“The individual may encounter constraints at the interpersonal level It is only when this type of constraint has been overcome (if appropriate to the activity) that structural constraints begin to be encountered”* (p. 313).
- 3) **Structural constraints:** *“Participation will result in the absence of, or negotiation through, structural constraints”* (p. 313).

Figure 2-8
A Hierarchical Model of Leisure Constraints



Source: “A Hierarchical Model of Leisure Constraints”,
Crawford, Jackson, & Godbey (1991). *Leisure Sciences*, 9, p. 313

Crawford et al. (1991) proposed that the levels of constraints are ordered from the most proximal (intra-personal) to the most distal (structural), and that intra-personal constraints on leisure participation, as the most proximal, are the most powerful of the three, and structural constraints, as the most distal, are the least powerful. However, as they pointed out, a great deal of previous literature identified “structural constraints” as the most important. Moreover, Raymore, Godbey, Crawford and Von Fye (1993) concluded that the process model itself, with its concepts of intra-personal, interpersonal and structural constraints may potentially provide leisure researchers with a new foundation on which to base research into the nature of constraints on leisure. According to this model, people would not reach the stage of encountering higher order constraints, which might (or might not, depending on the nature and strength of these constraints), prevent them from doing what they would like in the way of leisure. However, empirical support for their versions of the model is inadequate, so that it is open to modification.

A few investigations show how leisure involvement might be analysed in these terms (intra-personal, interpersonal, and structural constraints). One of the investigations which empirically supported this model was conducted by Jackson, Crawford and Godbey (1993). They tried to develop the three discrete categories (intra-personal, interpersonal, and structural constraints) into a single model of constraints interacting within a sequential hierarchy. Thus, they refused to accept the idea of constraints as insurmountable barriers to leisure and conceived of them as phenomena that are more likely to result in modified participation than in non-participation. Hence, they saw leisure constraints as being best conceived of as those intra-personal, interpersonal and structural constraints that people recognise as potentially limiting their behaviour.

However, despite the hierarchy of importance of leisure constraints which classifies constraints as ordered from the most proximal (intra-personal) to the most distal (structural), a number of previous studies, including those by Trela and Simmens (1971) Buchanan and Allen (1985) McGuire, (1984) Mannell and Zuzanek (1991) Raymore et al. (1993) Raymore, Godbey and Crawford (1994), showed that “structural constraints” such

as lack of time, lack of money, lack of facilities, limit access to transportation and so on, were consistently the more important “reasons” given for inhibited leisure participation.

2.4.4 The Negotiation of Leisure Constraints

Until recently, there has been a conception of constraints being identified as insurmountable obstacles to leisure participation. The investigators have assumed that if people encounter constraints, the result would be non-participation. Since a new model of constraints (intra-personal, interpersonal, and structural) was proposed by Crawford et al. (1987), an alternative perspective has begun to emerge, by reference to which, constraints do not always result in non-participation, since some individuals may negotiate their way through constraints and consequently succeed in continuing leisure participation. However, Jackson et al. (1993) stated that participation which has occurred in the absence of constraints is likely to differ from participation resulting from negotiation of them. For instance, people want to go running every day, but because of a lack of time, they are not able to do so. However, lack of time might not result in non-participation, but may modify participation (e.g., running less frequency).

Jackson, Crawford and Godbey (1993) developed the idea of the negotiation of leisure constraints and their idea may be formally proposed in a first and central proposition as the negotiation theory:

The negotiation proposition: *“Participation is dependent not on the absence of constraints (although this may be true for some people) but on negotiation through them. Such negotiation may modify rather than foreclose participation. (p. 4)*

In empirical support of this proposition, Scott (1991) advanced the view that, a) constraints are frequently interrelated. For instance, intrapersonal constraints on the part of individuals create structural constraints for others by limiting opportunities. Similarly, time commitments (structural constraints) experienced by the individual may result in listing problems for a groups’ members as a whole (an interpersonal constraint), b) constraints are not in themselves insurmountable. Ten constraints were recognised by the survey which was

associated with participation in contract bridge either by an individual or by a group. The author argued that three methods of constraint negotiation were exposed: (1) the acquisition of information about facilities and opportunities for the younger generation; (2) the adoption of changed scheduling of the games by responders due to a reduction in the membership and the time an individual could commit; and (3) the adoption of skill development to allow participation in excellent play.

Kay and Jackson (1991), in a British survey, asked individuals how they dealt with two more significant problems in leisure constraints studies, financial and time constraints.

As a result of financial constraints, respondents' experiences were as follows:

- 60% reduced participation.
- 11% saved money due to reduced participation.
- 11% did not participate at all.
- 8% looked for the cheapest opportunity.
- 4% made other economies

As a result of time constraints respondents' experiences were as follows:

- 71% reduced participation.
- 27% reduced the time spent on household work.
- 2% reduced the time they spent at work.

They suggested that the negotiation method adopted by an individual would depend partly, if not completely, on the problem encountered.

Jackson and Rucks (1995) developed and supported the concept of negotiation of leisure constraints by using both qualitative and quantitative data from Canadian students, in a study which confirmed Jackson, Crawford and Godby's (1993) proposition. The authors, in their study, put forward the proposition that some individuals negotiate their way through constraints on their leisure, instead of reacting passively to constraints by non-participation,

thus rejecting the idea that constraints and barriers are always insurmountable obstacles to leisure.

Structural constraints, like the socio-economic variations in the previous leisure constraints investigations, have been one of the most important factors which was derived from a transformation of the mean scores reported by Jackson, in press. Likewise, by inference, Jackson and Rucks (1995) also found that by negotiating their way through leisure constraints, individuals could modify their participation using one or more of the strategies defined earlier. This suggested the following proposition:

Negotiation and the reporting of constraints: “ *Variations in the reporting of constraints can be viewed not only as variations in the experience of constraints but also variations in success in negotiating them.* (p. 6).

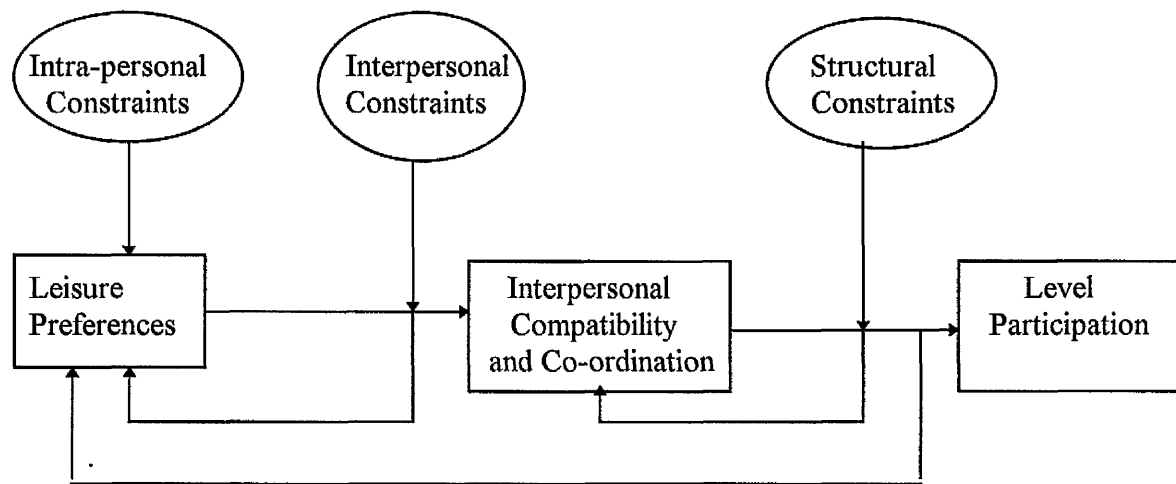
Sometimes there is no interest in participating in an activity due to the socio-economic perspective. Jackson (1990b) showed that this non-participation might also be partly related to structural constraints. Accordingly, Jackson et al. (1993) stated that:

“ *Absence of the desire to change current leisure behaviour may be partly explained by prior successful negotiation of structural constraints*” (p. 6).

He further pointed out that forms of interaction among constraints are not a new notion, since they had been discussed by many researchers previously. Crawford et al. had addressed them in 1987 and had developed their model by 1991 (Crawford et al. 1987) and (1991). Other forms of interaction have also been proposed in the literature on constraints. For example, (Witt 1990), which suggested that interaction among structural constraints should be investigated. Henderson et al. (1988) pointed out another form of interaction such as the succeeding perceiving and experience of intervening constraints. Scott (1991) recognised several examples of constraints interaction, associated with young bridge players as intra-personal constraints. He also identified the reduction of players in order to create limited opportunities for others as a structural constraint. In summary, it may be stated that:

Interaction between types of constraints: *Anticipation of one or more insurmountable interpersonal or structural constraints may suppress the desire for participation* (p. 7)
(Figure 2.9).

Figure 2-9
Interaction Among Types of Constraints



Source: "Negotiation of Leisure Constraints".
Jackson, Crawford, & Godbey (1993), *Leisure Sciences*, P. 7.

Jackson et al. (1993) suggested that it is necessary to subdivide individuals who demonstrate a proactive response into those who are successful and these who are partly successful. Three categories of response relating to three groups of individuals have been recognised by Kay and Jackson (1991):

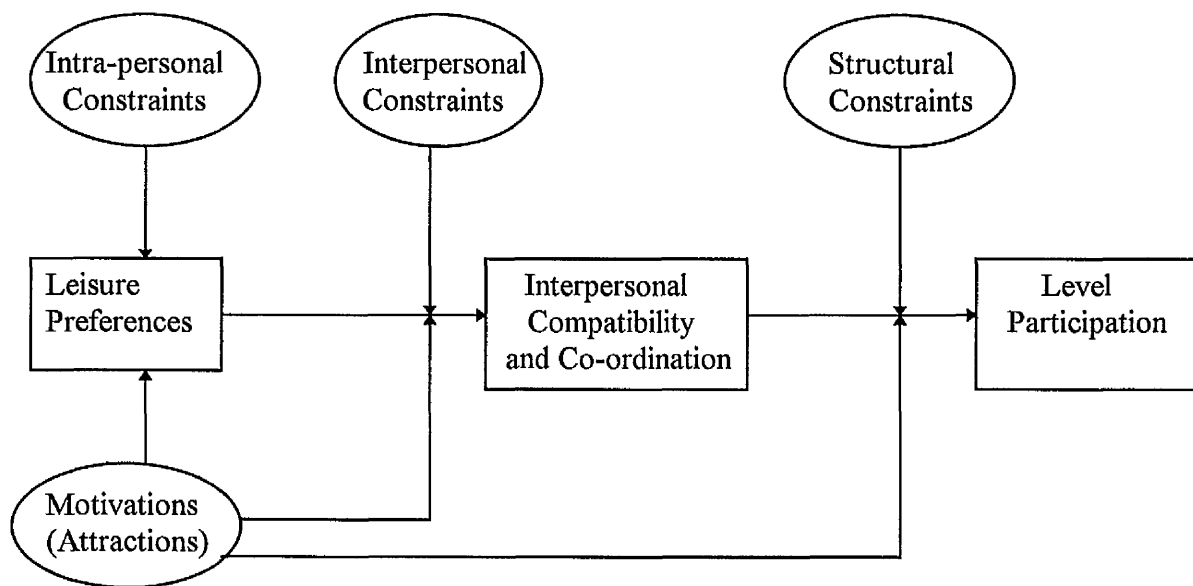
- (a) Reactive response = individuals who did not participate in their desired activity.
- (b) Successful proactive response = individuals who, in spite of encountering constraints, did not reduce their participation at all.
- (c) Partly successful response = individuals who participated but in a changed manner.

Jackson et al. (1993) suggested that the level of participation is more significant than 'participation versus non-participation' as used in the model proposed by Crawford et al (1991), and that it may be observed as a function of the interaction or balance between constraints and motivation. On this basis, perhaps the proposition of balance could be stated as follows:

The balance proposition: "Both the initiation and outcome of the negotiation process are dependent on the relative strength of, and interactions between, constraints on participating in an activity and motivations for such participation" (p. 9).

Figure 2-10

Leisure Participation as the Product of a Balance between Constraints and Motivations



Source: "Negotiation of Leisure Constraints".
Jackson, Crawford, & Godbey (1993), Leisure Sciences, P. 9.

This a unique piece of research illustrated in (Figure 2.10) attempted to link motivation with constraints and merge motivational factors within the model, whilst previous investigations had only dealt with the strength relationship between preference and constraints and its consequence for participation. Investigations related to the interaction of motivation and

perception of constraints, and the relationship between them was empirically examined. As the authors pointed out, the concept of negotiation needs further empirical support, with the three constraints levels (intra-personal, interpersonal, and structural), being investigated simultaneously.

2.4.5 Ceasing Participation in Sporting Activities

The issues of ceasing participation and barriers on leisure behaviour have attracted increasing attention among investigators. Specifically, such research has focused on ceasing behaviour and constraints as inter-related concepts which are central to other aspects of the leisure decision-making process. As Jackson and Searle (1985) stated:

“the problem of no-participation cannot be isolated from the more general context of an individual’s recreation choices and behaviour, together with all the factors, both positive and negative, that influence recreational choices”(p. 697).

Previous research by Godbey (1985) Jackson and Searle (1985) Jackson and Dunn (1988) and McGuire, O’Leary, Yeh and Dottavio (1989), related to ceasing participation and constraints on leisure behaviour, have produced models that present leisure behaviour as the outcome of a complex process of decision-making. A model of leisure decision-making based on Jackson and Dunn (1988) and McGuire, et al. (1989) and confirmed by Searle, Mactavish and Brayley (1993) was based on ceasing and starting participation and included the following classifications:

- Quitters = people who ceased participation in at least one regular activity in the past year of the study and had not started participating in any new activities.
- Replacers = people who ceased participating in at least one regular activity in the past year of the survey and had started participating in at least one new activity during the same period.
- Adders = people who had not ceased participating in any regular activity in the past year of the study and had started participating in at least one new activity during the same

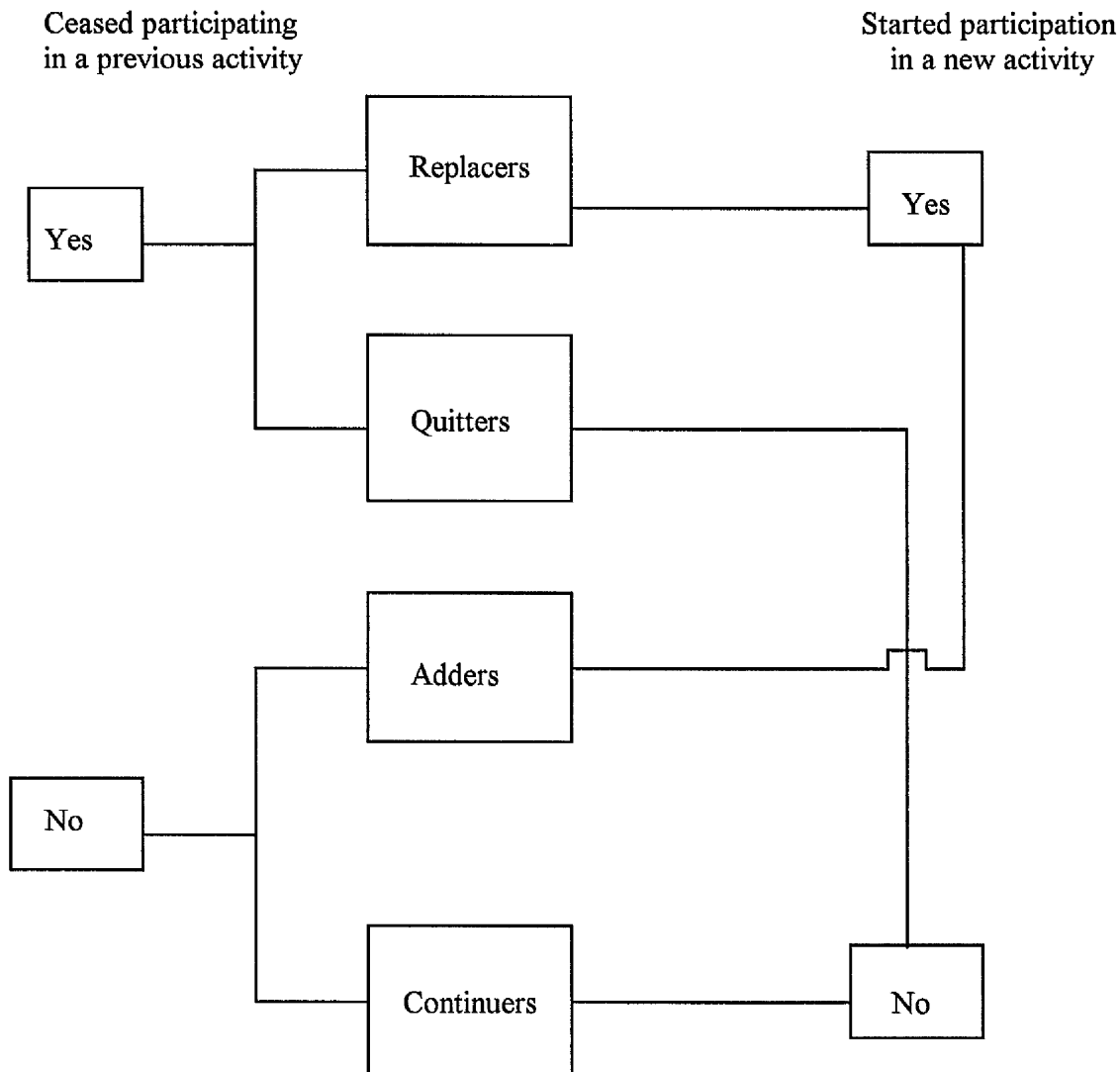
period.

- Continuers = people who had not ceased participating in any regular activity in the past year of the survey and had not started participating in any new activities during the same period.

As Jackson and Dunn's model (1988) and that of McGuire et al. (1989) (Figure 2.11) confirmed, the categories discriminate between and among people's leisure attitudes, leisure satisfaction, age, level of participation in recreation, years in education and life satisfaction. Jackson and Dunn (1988) who utilised data from a national survey in Canada included a wide variety of recreation activities, whilst McGuire et al. (1989) used data from the Nation-wide Recreation Survey (NRS) in North America which was specific to outdoor recreation activities. However, both studies contained data about starting and ceasing leisure activities.

Searle et al. (1993) utilised data based on Brayley and Searle's (1991) "Manitoba General Survey on Recreation and Leisure". Their samples ranged in age from 16 to 24 years and so were in the youngest age category.

Figure 2-11
Classification of Respondents by Ceasing and Starting Activities



Source: "Integrating Ceasing Participation with Other Aspects of Leisure Behaviour"
 Jackson & Dunn (1988), *Journal of Leisure Research*, 20(1), p. 38.

The results of the above-mentioned three empirical studies showed that:

Replacers were found by Jackson and Dunn (1988) to be 27.4%, by McGuire et al. (1989) to be 4.2%, and by Searle et al. (1993) to be 19.3%

Quitters were found by Jackson and Dunn (1988) to be 22.7%, by McGuire et al. (1989) to be 18.3%, and by Searle et al. (1993) to be 25.3%

Adders were found by Jackson and Dunn (1988) to be 20.2%, by McGuire et al. (1989) to be 17.9%, and by Searle et al. (1993) to be 16.2%

Continuers were found by Jackson and Dunn (1988) to be 29.7%, by McGuire et al. (1989) to be 59.6%, and by Searle et al. (1993) to be 39.2%

In Jackson and Dunn (1988) and McGuire, et al. (1989), several questions were utilised to replicate parts of the previous research. Hence, one aspect of the analyses focused on questions about ceasing and starting participation in leisure activities. Searle et al's model considered factors that help to judge between and among people who were classified as replacers, quitters, adders, and continuers. The variables of the study were taken up from previous investigations. Leisure attitude, for example had been previously dealt with in Crandall and Slivken (1980) Young and Kent (1985) and Fishbein and Manfredo (1992), leisure satisfaction in Beard and Ragheb (1982) Ragheb and Griffith (1982) and Sneegas (1986), education in Markides and Martin (1979) and White (1975) and participation in recreation in DeCarlo (1974). As Searle et al. (1993) pointed out, age was included because it had been a factor in two previous studies which were used and was also reported by many researchers, including Gordon, Gaitz and Scott (1973) and Kelly, Steinkamp and Kelly (1986) to be a factor in leisure participation. He went on to suggest that leisure attitude, leisure satisfaction, age, education and sex were associated with the four categories. The result of his study showed significant differences in all factors.

Boothby, Tungatt and Townsend (1981) pointed out that the problem of why individuals do not participate in recreational sporting activities has annoyed researchers in the field.

Previous research has addressed the fact that there are extensive relationships with education, income, age, gender, personality and social status which define the groups most likely or least likely to participate in recreational sporting activities. Sporting activities may be given up for many reasons, and, indeed, some participants may have more than one reason for giving up an activity. The six most important categories of reasons for ceasing participation are cited by the authors as:

1. Loss of interest which is a category which may be related to the problem of lack of interest or may occur gradually with increasing age or may relate to a particular sporting activities in general.
2. Lack of facilities which is related to the problems of provision for sporting activities, such as pools, courts, pitches, etc and also with problems of access to the facilities.
3. Fitness/Ability which is related to problems of health and disability, that may occur in the individual's life span.
4. Leaving youth organisations where previous participation in recreational sporting activities had been supported because it represented the social network. This category is also associated with a reduction in access to facilities. According to the authors, this category is the most significant reason for ceasing participation.
5. Moving away from the area which is related to the problem of environment. This may be the outcome of permanent movement from a place of residence or frequent changes in location
6. Lack of spare time which is related to such self- designed and personal constructions as time budgets.

The issue of the internal homogeneity of the concept of constrained leisure was addressed by Jackson (1988), who proposed that it has more than one aspect. He argued that if the concept had internal homogeneity, this would have theoretical and practical implications, with constraints on participation and reasons for ceasing being equivalent and of interchangeable. Jackson and Dunn (1991) empirically supported this with twelve items co-relating reasons for ceasing participation in a former activity with the same items reported to constraints on participation in a new activity, in a study which used data from individuals aged 18 and older in two province-wide surveys in Canada. However, a number of model variables have been utilised in leisure constraints investigation as a whole. Jackson and Rucks (1993) argued that the previous study conducted by Jackson and Dunn suffered from many limitations, all of them stemming from the fact that the data for the comparison of reasons for ceasing a former activity and constraints to participation in a new one were collected in two separate surveys (four years apart). They pointed out that despite the

surveys being similar in many key respects (e.g., similar samples structure, and similar research instruments), other problems remained. However, they suggested that three problems could be remedied if:

1. *“Two leisure constraints scales (one dealing with reasons for ceasing participation, the other with barriers to new participation) were completed by a single sample of respondents. Therefore, it is possible not only to make comparison between the scales on a global basis but also to assess responses to both sets of constraints on an individual basis among the subgroup of the sample who had both ceased participating in a former activity and wished but were unable to start a new one.*
2. *The two sets of items were virtually identical in wording.*
3. *The response scale were identical for the two sets of constraints items”.*

They further indicated that 52.2% of the respondents had discontinued participating in sporting activities in the past year of the study, whilst 54.6% would like to participate in a new activity but were unable to start. Despite the fact that some similarities between constraints on participation and reasons for ceasing participation were recognised, in most of the comparisons, significant differences were found.

It should be noted that all of the research supported the concept that ceasing participation should be integrated with other aspects of leisure behaviour. This was because the result of a study of the constraints associated with one aspect of leisure behaviour cannot properly be applied to make a prediction about any other. Information about ceasing participation itself may lead to misleading findings, and should consequently be used in association with participation data. As can be seen, Jackson and Dunn's (1988) model (Figure 2.11) may be the best way to combine different aspects of participation and non-participation.

2.4.6 Leisure Management and Leisure Constraints

According to Romsa and Hoffman (1980), a major reason for investigation into recreation is to know why, where, and in what numbers people participate in recreation. They pointed

out that such information is essential to leisure and recreation planners and managers who formulate and provide recreation services within economic, political, and environmental constraints. According to them, the information is also helpful in determining whether leisure services are allocated equitably.

Many researchers believed that the identification of elements that limit participation can improve leisure management. For instance, McGuire (1984: 324) noticed that

“by assessing the extent to which a person is inhibited from leisure involvement by (constraints) it will be possible to design programs to remove these constraints”.

Boothby et al. (1981) noted that, as a result, this, may increase the quantity and quality of participation, or lead to the reduction of “wastage” i.e., the number of individuals who cease participating

Wall (1981) suggested that suppressed demand can be constrained for individuals who would like to participate in sporting activities. Participation in recreational activities could depend on the removal of these constraints.

Searle and Jackson (1985a) suggested that, without information on constraints, research into leisure management will not be able to develop recreation policy, programme planning and management strategies. Similarly, McGuire and O’Leary (1992) pointed out that, in the field of leisure constraints, research is more likely to be related with practice. For instance, participation in sporting activities can be enhanced by identification of the factors which relate to non-participation and constraints

Searle and Jackson (1985b) pointed out that the study of leisure constraints can provide benefits to recreation service agencies at four levels: policy, philosophy, programme planning, and marketing. Jackson (1988) basing himself on Searle and Jackson (1985a),

addressed five questions which may help leisure management in the investigation of constraints.

- A. Is the delivery of leisure services satisfactory, or do gaps in services create constraints for potential participants?
- B. What other constraints influence participation?
- C. Which constraints are most properly coped with by practitioners, and which are beyond their influence?
- D. Are any subgroups of the population at a specific disadvantage with respect to their access to leisure services because of the effects of constraints on participation?
- E. What strategies can be developed to alleviate the effects of constraints on participation?

Boothby et al. (1981a) suggested that reasons for non-participation may be related to two types of change:

- (1) The physical ability of the individual participant can be changed.
- (2) The relationships between the individual and his sporting environment can be changed.

The environment included:

- a. the sports activity itself and its characteristics;
- b. the facility network in which this activity takes place;
- c. the social network which supports sports activity;
- d. the social and economic constraints which bound the participant's life style.

Godbey (1985) classified constraints into

- a. those which the organisation has a potential to change.
- b. those which the organisation has little potential to change.

He added that it is obvious that some reasons for not participating can be changed by the power of the agencies. For instance, reasons such as inconvenient timetables, unawareness

about the existence of services, poorly kept and maintained facilities and even high fees and charges, are among the constraints that relate to management of the recreational organisations.

In Spotts and Stynes (1982) and Godbey (1985), one of the most significant constraints on public leisure services is identified as unawareness, which they have suggested as one of the aspects that the organisation could potentially act upon. However, as they point out, it is possible that, while people know the service exists, some wish to participate and others do not. These categories are not rigid, and they should be set according to the sub-group of the population targeted by the organisation. For instance, the organisation might seek the removal of constraints for individuals who wish to participate, or might seek to persuade or interest the individuals who do not wish to participate to do so.

Transportation problems are considered by researchers such as Hultsman (1992) and Jackson and Rucks (1993) to be constraints on participation in sporting activities, particularly among young adults. Some solutions have been suggested such as centralised activity locations and agency-sponsored transportation to reduce the impact of a reduction in transport. As various life stages have needed different programmes for leisure activities, service providers need to respond towards the development of programmes particularly focusing on an individual's interests.

Searle and Jackson (1985a) took the view that day care programmes might give individuals the opportunity to participate. They suggested the implementation of social programmes designed to gather people to meet others, such as leagues for physical activities programmes, in order to alleviate constraints related to lack of partners. Moreover, it might be possible for organisations to provide facilities programmes on particular days or in a particular time period free of charge in order to encourage people to participate.

Target marketing, as Godbey (1985) pointed out, is a marketing approach to public leisure services, which not only gives rise to satisfactory participation but is also a significant measure by which to consider the success of an agency. As Howard and Crampton (1980) stated, the agency's services must be effectively communicated to the public. The same

authors (1984) argued that leisure and recreation administrations encounter major marketing problems due to the fact that specific programmes are needed for different groups, because they noted that equity should be emphasised rather than equality of opportunities for all. If equality is to be achieved, special groups should be targeted. For instance, different groups should be prepared to accept different prices for disadvantaged people (e.g., low income, unemployed). Searle and Jackson (1985a) suggested that target marketing is the action of an agency or delivery administration which helps to identify the characteristics of those it desires to serve. This information then permits the agency to design its programme and services to "fit" different sections of the population. Toy, Rager and Guadagnolo (1989) suggested hybrid conjoint analysis as a leisure research tool, which can be used for several leisure research applications including new product/service identification, competitive analysis, pricing, market segmentation, and repositioning of products/services.

In relation to their participation in sporting activities, disadvantaged groups need special consideration by planners and administrators. This is because the constraints on sporting activities participation are not equally distributed across the society. This issue is specially relevant to ethnic minority groups. Carroll (1993), based on a survey conducted in England, suggested that in any attempt to increase participation among ethnic minority groups, there should be close co-operation between local authorities and organisations.

According to McGuire and O'Leary (1992), one of the most significant strategies which can overcome lack of interest is the provision of leisure education. As Woodburn and Cherry (1978) stated:

"leisure education is a process of providing individuals with the knowledge and understanding of leisure, personal resources and skill for leisure, personal values about leisure, and positive attitudes towards leisure."(p. 246).

According to Searle and Jackson (1985a), individuals can use their leisure as effectively as they desire through such a process. In addition, the same authors suggested that recreation

agencies can incorporate the process of leisure education into their efforts due to expanding participation.

Provision of leisure and recreation education has been widely investigated by researchers such as White and Coakley (1986) and Thompson and Grobe (1991), who identified it as one of the most important strategies which could reduce constraints on participation in sporting activities.

Gratton and Tice (1989) noted that one specific area which has never been exploited with the General Household Survey data was the effect of health on participation in sporting activities. The same authors presented a comprehensive investigation which displayed the relationship between sports participation and health.

2.5 Related Research

Recently, empirical studies on leisure constraints have been widely reported in the leisure and recreation literature. In order to understand the factors assumed by researchers, a diversity of aspects of constraints related to participation in sporting activities have been investigated with sophisticated methodological variations. Comparison between these methodologies is not a very easy task. The methodological variations are outlined as follows:

The main aspects of leisure constraints investigated were as follows:

- a) Reasons for ceasing participation and barriers to participation in sporting activity examined, for example, by Boothby et al. (1981) Jackson and Dunn (1988) Chick, Robert and Romney (1991) and Searle, et al. (1993).
- b) The desire but inability to participate in a new activity examined, for example, by Jackson (1983) Jackson and Rucks (1993) and Jackson and Henderson (1995).
- c) The desire but inability to increase the level of participation examined, for example, by Kay and Jackson (1991).

d) Constraints on actual participation examined by Shaw, Bonen and McCabe (1991).

The measurement and statistical analysis of leisure constraints were changed from an item by item approach to a cluster of items approach in Jackson (1983) and Searle and Jackson (1985b). This new method was supported and used by Backman (1991) Henderson, Stalnaker and Taylor (1988), Jackson (1993), Raymore et al. (1994) and Jackson and Henderson (1995) so that, now, data analysis typically rejects the item by item approach. Jackson (1993) identified the use of factor analysis as a new step in leisure constraints research, and he emphasised that the reasons for using this are as follows:

- (a) It can provide a better understanding of the underlying structure of the concept of leisure constraints, as argued by Williams, Schreyer and Knopf (1990).
- (b) Items within factors can be grouped to create internally conforming sub-scales, which can be analysed for association with other variables.
- (c) The dimensions are generally more valid than for single items.

The general population is utilised in the majority of the studies of leisure constraints (e.g., Jackson, 1987 and Shinew, Floyd, McGuire and Noe, 1995). Student samples have also been utilised in the investigation of constraints, for example, by Raymore et al. (1994), Jackson and Rucks (1995) and Ehsani, Carroll, and Hardman (1996). Constraints researchers have used different samples of population, including specific subgroups, such as ethnic minority groups (e.g., Carroll, 1993 and Phillip, 1995) adolescents (e.g., Hultsman, 1993 and Raymore, 1995) the elderly (e.g., McGuire, 1984; Mannell and Zuzanek, 1991 and Lawton, 1994) women (e.g., Henderson, 1994; Henderson, Bialeschki, Shaw and Freysinger, 1996, Shaw, 1994; Mowl and Towner, 1995; Kay, 1996 and Tirone and Shaw, 1997) and social classification like race, class, black and white (Floyd, Shinew, McGuire and Noe, 1994). Constraints have been investigated in relation to a diversity of leisure activities such as trail use (Bialeschki and Henderson, 1986), hunters (Wright and Goodale, 1991 and Floyd and Gramann, 1997), bridge players (Scott, 1991), a pool league (Chick, Roberts and Romney, 1991), climbers (Ewert, 1993), ski destination (Klenosky, Gengler and Mulvey, 1993), aerobics participants (Frederick and Shaw, 1995), fishing (Toth, Jr and

Brown, 1997). As Beckers (1995) suggested the main studies of constraints have been carried out in the United States of America and Britain, completely neglecting the international comparative perspective.

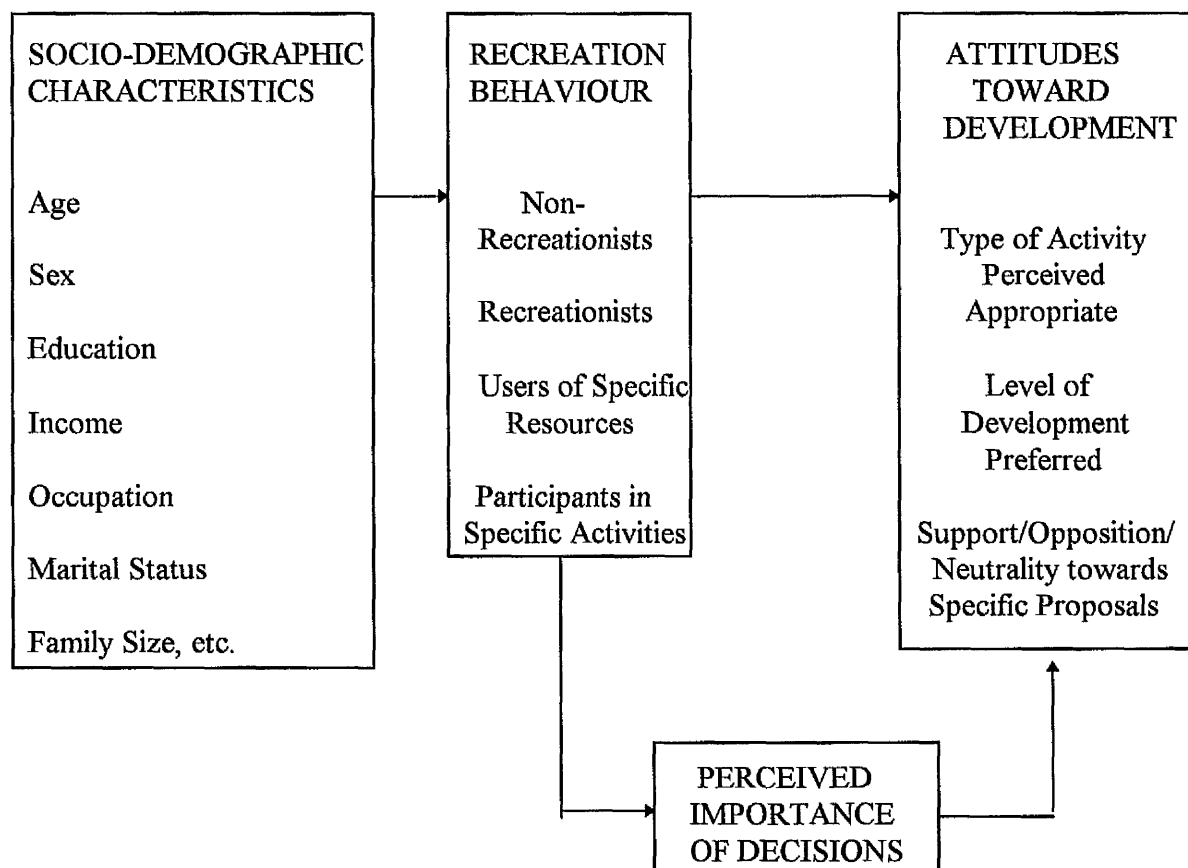
A variety of instruments have been utilised by researchers. These in terms of both the nature of and number of constraints in their investigation. The constraints investigated in the majority of studies have been structural constraints (e.g., Newby and Lilley, 1980; Schreyer, 1986; Hultsman, 1992 and Jackson, 1993). However, a few studies, including Raymore, Godbey and Crawford (1994), have investigated intra-personal and interpersonal constraints. The number of items of constraint varied from four, in Romsa and Hoffman (1980) to fifty five, in Henderson, Stalnaker and Taylor (1988).

Although there are many quantitative and qualitative methodological variations in studies in the field of leisure constraints, researchers are still in the process of developing empirical studies. According to Jackson (1988) and McGuire and O'Leary (1992), there are still inadequate empirical studies of leisure recreation management, of the hierarchical model of leisure constraints proposed by Crawford et al. (1991) and of propositions such as the hierarchy of importance proposition and the negotiation and balance proposition put forward by Jackson (1993). As reported by Stockdale, Wells and Rall, 1996), there is also a particular lack of cross-cultural comparison research in the field of leisure constraints.

A number of studies of leisure have suggested that the perception of constraints to leisure or constraints on leisure is associated with demographic differences. According to Searle and Jackson (1985b) Raymore et al. (1994) and Jackson and Henderson (1995) the main demographic variables are age, level of education, gender, and socio-economic status. Lime and Stankey, (1971) suggested that visitor attitudes should be considered as a principal element in the formulation of management objectives for recreational source planning. Jackson (1980), investigating socio-demographic variations in recreation participation and attitudes towards recreational management and development strategies, proposed a range of socio-demographic characteristics based on major factors in participation in recreational sporting activities (Figure 2. 12).

Raymore et al, (1994) investigated socio-demographic differences in the perception of constraints, using student samples and basing himself theoretically on the hierarchy model of leisure constraints proposed by Crawford et al. (1991).

Figure 2-12
Interrelationships between Socio-demographic Characteristics, Recreation Behaviour, and Attitudes Toward Development.



Source: "Socio-Demographic Variables, Recreational Resource Use, and Attitudes Toward Development in Camrose, Alberta" Jackson (1980), p.191.

Previously socio-economic group, gender, education, and age have been considered as the major socio-demographic variables related to the perception of leisure constraints.

Perception of constraints and socio-economic group: several investigations including those by Raymore et al. (1994) and Stockdale, et al. (1996) confirmed that one of the significant variables which related to the perception of constraints is the socio-economic group. According to these, there are significantly negative relationships between participation and low income. Gratton and Taylor (1995) suggested how managers might use suitable management information to develop their understanding of the price-demand relationship and consequent pricing decisions, with the help of economic analysis.

Gender differences and perception of constraints: A number of studies including Henderson (1994), Shinew et al. (1995) and Jackson and Henderson (1995) have addressed the fact that there is a significant relationship between gender differences and the perception of constraints. Henderson (1994) suggested that men and women are represented in a diversity of race, class, and other positions in society which must be investigated. She argued that talking about women globally is impossible without falling into the trap that makes some females invisible, especially women who are European or American. According to Carrington, Chivers and Williams (1987) who investigated gender differences among South Asian people in the United Kingdom, there are significant differences between the perception of leisure constraints by males and females, particularly among Muslims.

Education and perception of constraints: There are significant relationships between education and participation in sporting activities. Searle and Jackson (1985b) stated that relationships between the perception of constraints varied according to whether the level of education reached was:

a) less than high school; b) high school; c) some post secondary school; and d) university. He showed a reduction of constraints on participation in sporting activities related to increasing levels of education. Jackson (1983) found that the proportion of respondents desiring an additional sporting activity expanded from 35.3% (less than high school) to 60.8% (university) education.

Perception of constraints and age: Different age groups have a different perception of constraints. Empirical studies also show negative relationships between age and participation in recreational sporting activities as representing one of the strongest constraints. For instance lack of money and transportation problems in early adolescence (Hultsman, 1992) and lack of a partner and lack of time for older people (e.g., McGuire, et al, 1986 and Mannell, and Zuzanek, 1991) were found to be strong constraints on participation in recreational sporting activities. Raymore (1995) found that young adulthood, particularly after high school age, is the best age for participation in sporting activities. Bergin (1989) established that 63% of students had goals for participation in their chosen activity. However, according to Searle and Jackson (1985b), this age group suffers from other constraints, such as lack of time, lack of opportunities and so on.

2.5.1 Relationship between Constraints and participation

Whilst it has often been assumed in the literature on leisure constraints that there is a negative relationship between constraints and the level of participation in leisure activities, in fact, the few empirical studies conducted, indicate that constraints are likely to be reported not only by non-participants, but also by participants.

Boothby, Tungatt and Townsend (1981), Godbey (1985) and McGuire (1984) have suggested that a significant practical contribution could be made by an empirical study of leisure constraints. In fact, a few attempts have been made to identify the link between perceived constraints and participation. These studies have challenged the assumption that constraints always prevent participation and have provided evidence that the assumption of a link between perceived constraints and participation may be problematic.

Several researchers have focused on the nature of leisure constraints. In a study by Jackson et al. (1993), lack of money, lack of facilities, lack of time and a transportation problem,

were identified as structural constraints, which were found to be the most important constraints. An absence of constraints was seen to imply higher levels of participation. Social theory and sociological studies have noted that social structures such as gender, age, education, lifestyle, occupational status, and socio-economic group influence people's decision-making and options in their life. At the same time, some investigations have found that other types of constraints (intra-personal and interpersonal) are related to participation. These studies have shown that participation in actual recreation activity is related to the absolute importance of particular constraints variables.

According to Shaw, Bonen and McCabe (1991), there is some evidence to show that there is a direct and negative link between the level of participation in leisure activities and the reporting of constraints in the literature. Their study, which was conducted in Canada included eleven reported constraints and participation levels indicated that demographic status related more strongly to participation than did perceived constraints. Table 2.6 shows separately for men and for women the frequency with which each of the eleven constraints was.

Table 2-6
Frequency of Reported Constraints for Women and Men

Reported Constraints	Women %	Men %	Total %
Lack of time because of work	49.4	60.1	54.0
No facilities nearby	20.0	17.6	19.0
Lack of time because of leisure activities	14.9	21.2	17.6
Low energy	17.7	9.9	14.4
Requires too much self discipline	15.5	13.0	14.4
Costs too much	13.3	12.4	12.9
Injury or handicap	7.6	8.1	7.8
Ill health	7.9	5.2	6.7
Lack of necessary skills	7.7	4.7	6.4
Available facilities are inadequate	5.6	6.3	5.9
No leaders available	4.1	2.7	3.9

Source: "Do More Constraints Mean Less Leisure?
Examining the Relationship between Constraints and Participation".
Shaw, Bonen, & McCabe (1991), p.202.

However, Kay and Jackson (1991) have suggested that reported constraints are likely to come not only from non-participants but also from participants. They also expected that high levels of constraints were related to frequent participants, because participation exposes individuals to more constraints. For instance, "lack of facilities" as a constraint may influence individuals, either by reduction or non-participation in a particular activity, and this may lead to an increase in participation in another one.

2.5.2 Constraints on women's recreational sporting activities

Mowl and Towner (1995) pointed out that in recent years a number of investigations have focused on leisure inequality, and especially, the inequality between men and women. Also a great number of studies relating to women's recreational sporting activities and, in particular, constraints on women's leisure activities, have appeared in leisure literature. These include Thompson (1985), Bialeschki and Henderson (1986), Chambers (1986), Dudu (1987), Allison and Duncan (1987), Henderson and Rannells (1988), Henderson, Stalnaker and Taylor (1987), Lenskyj, (1988); Henderson (1990a b c, 1991, 1992, 1994), Henderson and Bialeschki (1991), Henderson, Bialeschki, Shaw and Freysinger (1996) Hunter and Whitson (1991), Shaw (1991, 1992), Scraton (1994), Deem (1986, 1995), Green, Hebron, and Woodward (1987, 1990, 1995), Glyptis (1985) and Ahmed Khan (1997). Lenskyj (1988) argued that there are two types of major constraints for women. Firstly, there were biological and anatomical constraints, such as menstrual cycles, which are generally characterised by physiological and emotional changes and indicate hormonal changes. And secondly, there were the particular circumstances of women's lives, such as responsibilities for domestic work and child care which are task-oriented rather than time-oriented. Henderson (1994) referred to five stages of scholarship in giving a historical overview of the literature on the constraints on women's participation in leisure activities.

1. A period when women were “invisible”, with leisure scholars seeming ‘to assume that the male experience was universal... and constituted a basis for generalising about all human beings’ (p. 123).
2. A phase of ‘compensatory scholarship’ with the underlying notion that some women deserved to be acknowledged but had to be ‘judged in terms of their contributions based on typical male standards’ (p. 124)
3. The realisation that women were somewhat ‘different’ from men, as proposed, for instance, by Herrmann (1976), resulting in some investigation that described the oppression of women and the constraints on their leisure (p.125).
4. The culture of feminism which focused on women’s experiences but failed to take into account ‘historical, social and/or economic factors that may create the situations to which women respect’ (p.126).
5. The gender scholarship which filled this gap by addressing the complexity of expectations, roles and behaviours related to being a man as well as being a woman (p. 126-27).

Henderson (1995) suggested that in these stages, gender related to socially learned behaviours and expectations linked to being a man or woman, which means that it has major implications not only for females but also for males. The same author also stated that: *“women’s leisure is not impossible but neither has leisure become accessible for most women in the world”* (p. 9-10).

Mowl and Towner (1995) argued that the study of leisure should be placed contextually according to time, place, social setting and perception. In particular, each place can present a unique set of opportunities and constraints, not only in terms of its physical structure, but also its social environment. For example, there is a difference between western society or eastern society in terms of, culture, religion, and so on. To meet this problem, the Research Commission of the World Leisure and Recreation Association has set up a co-ordinated multinational study involving fifteen countries all over the world. These countries include the following developed countries: Australia, Canada, France, Japan, Italy, Spain, the UK

and the USA and the following less developed countries which have been taken in a rather arbitrary order from West to East: Colombia, Morocco, Greece, Israel, India, Malaysia and Hong Kong. It is clear that this sample is not universally representative. Moreover, the investigation is not a systematic cross-cultural comparative enquiry.

There were several investigations of women's leisure conducted in the UK in the 1980s including these by Green, Hebron and Woodward (1987), Deem (1986) and Wimbush (1986). Green, Hebron and Woodward (1990) stated that:

"Despite the changing nature of leisure, it has been consistently divided along lines of gender, as well as class and race. Our work has to a large extent been culturally and geographically specific. However, it is reasonable to assert that, as in any other fundamentally patriarchal society, British women occupy a socially and economically inferior position. Their material position and prevailing social definitions of masculinity and femininity have a determining effect on the ways in which we understand and live out our lives, including our leisure" (p. 167).

Scruton (1994) argued, that the conclusions of Green, et al.'s (1990) study reflects the assumption that we are in a 'post-feminist' era. However, the conclusions are based on assumptions of shared experiences in that women are seen to be materially disadvantaged and are defined by powerful ideologies of gender, for instance, socially made, shared definitions of femininity.

Raymore et al. (1994) conducted an investigation of the constraints on women's participation in sporting activities, based upon a model of constraints on leisure proposed originally by Crawford and Godbey (1987) and developed by Crawford et al. (1991). They used Canadian students as samples for their study, in which constraints were divided into three discrete categories (intra-personal, interpersonal, and structural) with twenty one item overall (seven items in each category). They found that the mean perception of constraints on leisure was highest for structural constraints, followed by intra-personal and then interpersonal constraints. The result of the study was similar to that of Henderson et al. (1988), which utilised fifty five statements and employed a factor analysis and showed that

structural constraints (lack of time, lack of money, and lack of facilities) were the highest constraints and intra-personal and interpersonal followed.

Jackson and Henderson (1995) took the view that gender is not only a question of biological difference, but also encompasses related social expectations and cultural definitions. Also, gender structure is the foundation for the social, political, and economic interaction between males and females. They found that the same constraints, structural constraints such as lack of money, lack of facilities, lack of time, and transportation problems were the most important for both genders.

As Henderson (1991) suggested, the situation of women and the process of feminism in understanding leisure constraints need to be further examined.

Jackson (1988) and Shaw (1994) have shown that gender differences disadvantage women in terms of the level or degree of constraints on their leisure participation. They suffer structural constraints such as lack of facilities, opportunities, programmes and transportation limitations as well as external constraints of a temporal, economic and socio-demographic nature. Particularly emphasised was the fact that men have more leisure time than women because of the unequal distribution of domestic work (see Hribkova's review, 1994, p. 30).

Auld and Case, (1997) argued that males and females have different perceptions of the resource exchange occurring in a leisure setting. They also noted that there were significant differences between males and females in the amount of resources exchanged in their primary leisure activity.

CHAPTER THREE

ENGLAND

3. General Background

3.1 History and Politics

The name of 'England' is derived from the Angles, one of the Germanic tribes which established monarchies in lowland Britain in the fifth century, after the final withdrawal of the Romans in 409. The Anglo-Saxon kingdoms were initially fairly small and numerous, but gradually larger entities emerged. Eventually Wessex came to dominate, following its leading role in resisting the Danish invasions of the ninth century. Athelstan (924-39) used the title of 'King of all Britain', and from 954 there was a single Kingdom of England. The present Royal Family is descended from the old royal house of Wessex.

In 1066 the last successful invasion of England took place. Duke William of Normandy defeated the English at the Battle of Hastings, and Normans and others from France came to settle. French became the language of the nobility for the next three centuries, and the legal and social structures were influenced by those prevailing across the Channel.

Almost all the English Crown's possessions in France were lost during the late Middle Ages. The union of England and Scotland took place in 1707, leaving England as the most populous part of the British nation state.

3.1.1 Government

In contrast to Wales, Scotland and Northern Ireland, England has no government minister or department exclusively responsible for its central administration. Instead, there are a number of government departments, whose responsibilities in some cases also cover aspects of affairs in Wales and Scotland. A network of ten Government Offices for Regions (GORs) is responsible for the implementation of several government programmes in the English regions.

Following a boundary review in 1995, there are now 529 English parliamentary constituencies represented in the House of Commons. After the General Election of 1 May 1997, England had 328 Labour Members of Parliament (MP), 165 Conservative, 34 Liberal Democrat and one independent. Conservative support tends to be strongest in suburban and rural areas, and the party has a large number of parliamentary seats in the southern half of England. The Labour Party has tended in the past to derive its main support from the big cities and areas associated with traditional industry, but it won many seats in the last General Election that had previously been considered safe Conservative constituencies. The Liberal Democrats, who are strong in the South West, have recently been gaining greater support in other parts of England, and the party now has a third of its 34 English seats in Greater London and the South East.

England elects 71 representatives (MEPs) to the European Parliament, which meets in full session in Strasbourg for about one week every month, although its committee work normally takes place in Brussels.

The English legal system comprises on the one hand a historic body of conventions known as 'common law' and 'equity', and, on the other, parliamentary and European Community (EC) legislation. In the formulation of common law since the Norman Conquest, great reliance has been placed on precedent. Equity law—law outside the scope of the common

law or statute law—derives from the practice of petitioning the Lord Chancellor in cases not covered by common law.

The Church of England, which was separated from the Roman Catholic Church at the time of the Reformation in the early sixteenth century, is the Established Church (that is, the official religion of England). The Sovereign must always be a member of the Church and appoints its two archbishops and 42 other diocesan bishops.

In geographical terms, England can be divided into an upland area lying to the north and west of a line linking the River Exe, in the south west of England to Humberside, and a lowland area, including the lowlands of East Anglia, to the south east of that line. In the north, are located, upland areas, hills and mountains such as the Lake District, the Pennines, and the Yorkshire Moors (Whitaker, 1998).

The English people are a mixed race of various invading stocks, Iberian originally, then Celtic and Roman, Anglo-Saxon and Norman French. As the historian, Trevelyan pointed out, before 1066 England was easy to invade from the low eastern and southern shores. The rugged mountains of Wales, Cornwall and Scotland provided refuge for the older Iberian, Celtic, and other stocks successively. The language was an amalgam of Celtic, Latin, Teutonic, and French. It became increasingly flexible and concise, with few inflections and a rich vocabulary.

This new English-speaking culture was ruled by an elite which based its position on the possession of land. This elite shaped the direction of such long-range factors as economics, technology, politics, philosophy, religion, as well as social structure.

In the Middle Ages, society was based on feudalism. In the sixteenth century, when feudalism was disappearing, Protestantism (in the form of the newly created Anglican Church) conveniently came on stage, but still imitated the manners, education, pastimes, and land management methods of the Middle Ages. The English system of residential Latin

grammar schools and the ancient colleges at Oxford and Cambridge did produce a century of genius—the seventeenth century—with Coke (the Common Law), Newton (mathematics and physics), and Boyle (chemistry). However, in the nineteenth century, the impact of the Industrial Revolution and urbanisation changed the educational system. The Education Act of 1870 established free elementary or board schools to improve literacy and to meet the humanitarian and scientific demands of the elder Huxley and others that the schools should provide a ladder from the gutter to the highest places in the land. Only in 1902 did England obtain a secondary educational system open to all on a merit basis.

There is much to be learned from detailed study of the growing impact upon English education of the Acts of 1902, 1913, and 1944 together with the laws setting up socialised health, welfare, and family support. The English have provided for increased equality of opportunity for the talented, and the elusive ruling elite, “the Establishment,” now absorbs talent into its ranks from all classes, including the “angry young men”. England is not complacent about her educational strategy and national style. The Government White Paper, *Secondary Education for All: A New Drive* (1968), stated the case for equal access in accordance with ability and aptitude, and the value of variety in education (Moehlman, 1963).

Government decisions taken in the mid-1960s led to the formulation of the so-called binary policy, under which a second sector of higher education was created alongside the universities. This second sector, for which no satisfactory label could be found, included the newly designated polytechnics and was to be distinguished by an emphasis upon teaching rather than research, on technology and the sciences rather than humanities, and on responsiveness to local needs rather than purely national priorities (Becher, 1989).

The political structure is based upon democratic principles with government and opposition parties. General elections are usually held at five yearly intervals. There are three main

political parties which form the foundation of the political structure: the Conservative Party with an underlying right-wing ideology; the Labour Party with traditionally a left-wing Socialist perspective, but recently, with New Labour, moderate centre ideologies, and the Liberal Democrats, centrists and reformers. Law and order is preserved by a highly-developed judicial system and a police force which is accountable to the Government (Hardman, 1995). England is a progressive industrial country.

3.1.2 Economy

Considerable changes in the economy of England have occurred during the twentieth century. In the past fifty years, jobs in services industries have grown and now account for three-quarters of employees in employment, with expansion having been particularly noticeable in financial and business services. Services account for three-quarters of gross domestic product (GDP) in London and the South East, and over a quarter of employees in Greater London work in financial services. London is one of the world's leading centres of banking, insurance and other financial services.

Manufacturing, although declining as a proportion of the employment base, remains important in a number of areas. In terms of GDP, it is most significant in the West Midlands (where manufacturing accounted for 31 per cent of the region's GDP in 1995, as opposed to 22 per cent in the country as a whole), the North and the East Midlands.

In agriculture, dairying is most common in the west of England, and sheep and cattle are reared in the hilly and moorland area of the North and South West. Arable farming, pig and poultry farming and horticulture are concentrated in the east and south.

As part of its plans to devolve more power to the regions, the new Government intends to set up Regional Development Agencies which, among other things, would promote

regeneration, inward investment and small business in their region (Britain: an official Hand book, 1998).

3.1.3 The Environment

Despite its relatively high population density and degree of urbanisation, England still has many unspoilt rural and coastal areas. There are now nine National Parks, six forest parks, 36 designated 'areas of outstanding natural beauty', 22 environmentally sensitive areas, over 200 country parks approved by the Countryside Commission, more than 1,000 km of designated heritage coastline, and about 2,000 gardens open to the public (Britain: an official Hand book, 1998).

3.1.4 Area and Population

The area of England is 130,410 sq. km and its population according to the 1991 census was 46,382,050 (22,469,707 males and 23,912,343 females). With demographic changes population was estimated in 1994 of around 48,708,000 which will increase to around 50,757,000 in 2001. Perhaps more significant than these raw statistics are the demographic changes which have occurred: whilst the population comprises mainly white Caucasians of Anglo-Saxon origin, around 3.3 million people in the country belonged to an ethnic minority group in Spring 1996, representing just under 6 per cent of the population; there are strongly represented ethnic groups ranging from the Irish to second and third generation Asian and Caribbean families (Hardman, 1995).

3.1.5 Climate

The climate varies from cool to mild with conditions both continental and maritime and the temperate oceanic, and rainfall evenly distributed over the year (approximately 178 days). The weather is very changeable because of cyclonic influences. In general, temperatures are higher in the west and lower in the east in winter and rather the reverse in summer (ranging from 39° to 63° Farenheit). Rainfall amounts are greatest in the west, where most of the high ground occurs. The climatic pattern of moderate rainfall with cool winters and summers, typical of a cool temperate Western Margin type climate, is modified by the influence of the sea, particularly on the north west coast. London has an average January temperature of .40 ° F (4.5° C), and average July temperature of 64 ° F (18° C), with annual rainfall 24"(600mm) (Marsden, 1984).

3.1.6 Religion

The main religion in the U.K is Christian, with the head of state designated as Head of the Church of England which originated from the Anglican Communion. While the UK is an essentially multi-denominational state, membership (1991) of other denominations is significant: Presbyterians, 1,291,672; Methodists, 483,387; Baptists, 241,842; other Protestants, 123,677; independent churches, 408,999; Orthodox, 265,258; Afro-Caribbean churches, 69,658; Mormons, 0.15m.; Jehovah's Witnesses, 0.12m.; Spiritualists, 60,000; Moslems, 0.99m.; Sikhs, 0.39m.; Hindus, 0.14m.; Jews,108,400. Finally, Roman Catholics in England and Wales were estimated at 4,526,873 in 1993 (Hunter, 1997).

There has been a fall in recent years in the number of full-time ministers and the number of adults recorded as members of most of the larger Christian churches. At the same time,

there has been significant growth in a range of independent churches, and in new religious movements.

Freedom of conscience in religious matters was achieved gradually from the seventeenth century onwards. The older laws discriminating against minority religious groups were gradually enforced less harshly and then finally repealed. Heresy ceased to be a legal offence with the passage of the Ecclesiastical Jurisdiction Act 1677, and the Toleration Act 1688 granted freedom of worship to Protestant minority groups.

In 1828, the repeal of the Test and Corporation Acts gave nonconformist Protestant Christians full political rights, making it possible for them to be appointed to public office. Roman Catholics Relief Act 1829, and the Jewish Relief Act 1858 enabled Jews to become Members of Parliament. The religious tests imposed on prospective students and academic staff of the universities of Oxford, Cambridge and Durham were successively abolished by Acts of 1854, 1856 and 1871. Similar restrictions on the staff of Scottish universities were formally removed in 1932.

The past thirty years have seen an increasingly diverse pattern of religious belief and affiliation in Britain. This has been linked both to patterns of immigration and to new religious directions among some of the indigenous population. Social structures have been gradually changing to accommodate this. For example, arrangements are made at many places of work to allow the members of the various faiths to follow their religious observances (Britain: an official Hand book, 1998).

Relations with the State

There are two established churches in Britain, that is, churches legally recognised as official churches of the State: in England the Anglican *Church of England*, and in Scotland the

Presbyterian *Church of Scotland*. The Monarch is pledged by the coronation oath to defend each church in its respective territory. There is no longer an established Church in Wales and Northern Ireland. Ministers of the established churches, as well as clergy belonging to other religious groups, work in services run by the State, such as the armed forces, national hospitals and prisons, and may be paid a state salary for such services.

Voluntary schools provided by religious denominations may be wholly or partly maintained from public funds. Religious education in publicly maintained schools is required by law, as is a daily act of collective worship. Religious broadcasting is subject to some legislative controls.

The State does not contribute to the general expenses of church maintenance, although some state aid does help repair historic churches. In 1996-97, for example, English Heritage grants to churches totalled £10.3 million as compared with the £100 million spent on the buildings by parishes. Assistance is also given to meet some of the costs of repairing cathedrals; some £4 million was made available in 1996-97. This funding is not restricted to Church of England buildings.

The Government share with the Church of England the upkeep of over 300 churches of special architectural or historic importance which are no longer required for regular parish use and for which no alternative use can be found. The contribution for the period 1995 to 1998 was about £7.5 million. The Historic Chapels' Trust, launched in 1993, aims to preserve the redundant chapels and places of worship of other denominations and faiths, including synagogues and temples, which are of particular architectural or historic interest (Britain: an Official Handbook, 1998).

Involvement in Social Issues

Religious involvement in broader social issues was highlighted in the Church of England' report *Faith in the City: A Call for Action by Church and Nation*, published in 1985. This led to the establishment of the Church of England's Church Urban Fund, an independent

charity which raises money to enable people living in urban priority areas to found projects which alleviate the effects of poverty on their lives. By June 1997, it had made grants totalling £27.1 million to 1,250 different projects.

The Inner Cities Religious Council, formed in 1992 and based in the Department of the Environment, Transport and the Religious, is a forum for discussion between the faiths and the Government, and encourages practical regeneration in the inner cities and run-down housing estates elsewhere. Chaired by a government minister, the Council comprises senior leaders of the Hindu, Jewish, Muslim, Sikh and Christian faiths, including the majority Black churches.

Unemployment and the Future of Work: an Enquiry for the Churches—a major report examining the problems of unemployment was published by the Council of Churches for Britain and Ireland in April 1997. Proposed solutions to unemployment include support for a statutory minimum wage, the implementation of a maximum wage, the implementation of a maximum 48-hour week, and an increase in taxes for high earners (Britain: an Official Handbook, 1998).

The Sacred Land Project

The Sacred Land Project, launched in April 1997, plans to conserve or create over 2,000 sacred sites in Britain during the next five years. Sponsored by the World Wildlife Fund for Nature, the Project will work with local communities, religious groups, and conservation and environmental organisations to re-open ancient pilgrim routes, create new pilgrim paths, help restore old shrines and sacred sites and develop sacred gardens. It not only celebrates Britain's multi-faith society but also demonstrates practical ways to improve the quality of life through care of the natural environment. The Project has the support of all the major Christian churches, as well as most of the other faiths practised in Britain (Britain: an Official Handbook, 1998).

The Christian Community

Church of England

The Church of England became the established church during the Reformation in the sixteenth century. Conflicts between Church and State culminated in the Act of Supremacy in 1534, which repudiated papal supremacy and declared Henry VIII to be Supreme Head of the Church of England. The Church of England's form of worship was set out in successive version of the Book of Common Prayer from 1549 onwards. The Church's relationship with the State is one of mutual obligation, since the Church's privileges are balanced by certain duties it must fulfil.

The Monarch is the 'Supreme Governor' of the Church of England and must always be a member of the Church, and promise to uphold it. Church of England archbishops, bishops and deans of cathedrals are appointed by the Monarch on the advice of the Prime Minister, although the Crown Appointments Commission, which includes lay and clergy representatives, plays a key role in the selection of archbishops and diocesan bishops. All clergy swear allegiance to the Crown. The Church can regulate its own worship. The two archbishops (of Canterbury and York), the bishops of London, Durham and Winchester, and 21 other senior bishops sit in the House of Lords. Clergy of the Church, together with those of the Church of Scotland, the Church of Ireland and the Roman Catholic Church, may not sit in the House of Commons.

Attendance's at services on a normal Sunday are just over one million. Many people who rarely, if ever, attend services still regard themselves as belonging to the Church of England (Britain: an Official Handbook, 1998).

3.1.7 Recreational Sporting Activities

“A healthy mind in a healthy body “ was a value which came to England at the time of the Tudor dynasty and had all the more impact because Henry VIII championed athleticism as well as nationalism and intellectualism. Physical education in England developed in the divided society, created through feudalism, out of which emerged two different traditions of physical education. The first was organised games such as football and cricket which appeared in the Public Schools, the second was physical training (evolved military drill), callisthenics and gymnastics, developed in state sector education, with the establishment of public elementary schools after the Forster Act of 1870 (McIntosh, 1968)

According to Hardman (1997), industrialisation and associated urban growth in early nineteenth century Britain contributed to an erosion of traditional controls. Social control, it was believed, could be achieved by altering the ‘external conditions’ in the practice of leisure; directed socialisation, through the rationalisation (i. e. ordered and controlled, preparing the mind and body for work) of recreational engagement, into activities deemed ‘respectable’ or ‘moral’ or ‘improving’, was one instrument used to set these qualities into the consciousness of the workers. Hence, employers and reformers in the Victorian era saw recreation as an important instrument for educating the labouring classes in the social values of middle class orthodoxy; it was a tool to forge more effective behavioural constraints in leisure. Diversion from drink was the general method employed by introducing new features and providing “... a proper environment for exposure to the superior example, whose values would ultimately be internalised” (Bailey, 1978). According to Mead (1967) to achieve the advancement of the working classes, they were to be socialised into the ‘right use of leisure’ through, for instance, participation at night school or ‘Mechanics Institutes’ to have their minds stretched with ‘Penny Encyclopaedic’ knowledge, manuals on political economy or lectures on geology. Socialisation meant subordination of the ‘lower orders’

through a variety of constructed recreations. However, such social control over the labouring classes' behaviour was largely ineffective, because it was not internalised, a fundamental pre-requisite, of socialisation.

Hardman (1997) pointed out that in the second half of the nineteenth century, sport came to be regarded as 'rational'. This new respect had its origins in a desire for a healthy and fit nation and in the desire for improved moral education and socialisation. Under the influence of earlier European developments, grounded in Rousseau's writings, moral education came to the fore and physical activity had a significant role to play: playground physical exercises were believed to "extend the moral influence of the teacher" (Committee of Council, 1839-40, p. 71), a theme which came to be the underlying belief of 'muscular Christianity', developed within and by English Public (private) schools. Initially, team games provided a means of occupying 'boarders' in a 'positive' activity, which promoted healthy exercise and was perceived as a healthy treatment to ill-discipline associated with the informal pastimes of the early nineteenth century.

The claims here were nineteenth century forerunners of twentieth century developments, in which various commentators were persuaded of the qualities and virtues to be derived from participation in play, games and sport and which could be transferred into the broader social and institutional world. The British author, H. G. Wells (1911), wrote of the value of imaginative floor games in "keeping boys and girls happy (and) building a framework of ample and inspiring ideas in them for future life. The American psychologist, G. S Hall (1937), cited team sport activities facilitating group loyalty "to develop a spirit of service and dedication not only to town, country and race, but also to God and the Church".

Mallery (1910) praised the virtues of organised play in setting "... *standards of self-control, of helping the other fellow, of fighting shoulder to shoulder for the honor of the team, of defeat preferable to unfair victory. These standards when translated into the language of*

political life we call Self-government, (Respect for the Law, Social Service and Good Citizenship” p. 156).

Sutton-Smith (1972) argued that structured activity facilitates the development of early behaviour patterns towards social organisation, an argument which echoes Cooley's (1962) view on 'actual life' experiences derived and internalised from the likes of family and play group relations.

Jolly (1876) pointed to the role of physical education in improving the anatomical and physiological functions of the body (physical development), cleanliness (personal hygiene), and social skills (sociability). For him, 'true physical education' should produce "healthy" shapely, and powerful men" and "healthy, strong, and handsome women" with training administered "equally to both sexes". Jolly's ideas stand in contrast to the themes contained within the government's 1870 Education Act which heralded a system of state elementary education in England and Wales, including a policy permitting 'drill' to be counted as school attendance for grant purposes. This drill (military in form) was the only officially approved form of physical education until 1890. It was introduced to socialise young boys into "habits of sharp obedience, smartness and cleanliness" (Committee of Council, 1870) with the declared aim of inculcating "ideas of order, regularity and discipline without which it was difficult to obtain fully qualified soldiers and sailors" (Hansard, 1875). Some of the results associated with control and discipline are reminiscent of the Spiess form of gymnastics, following the ban on Turnen in the early part of the nineteenth century.

Church (1997) informs us that according to the General Household Survey (1993-94), the vast majority of young people (around 98 per cent of children) had participated in a sporting activity outside of school lessons in England between the ages of 6 and 16 in 1994.

According to this survey, walking (two or more miles) was far by the most popular physical activity for both men and women of all ages in Great Britain from 1987 to 1993-94, with around half of adults participating in the three months before they were interviewed. Men are the more likely to participate in any activity although the gap has been narrowing. In fact, 72% of men and 57% of women participated in at least one sporting or physical activity in the four weeks prior to being interviewed. In general, participation drops sharply with age from the mid 40s on. 86% of those aged between 16-19 had participated in at least one physical activity. Among adults aged 16 to 24 team sports were most popular, with three in ten adults of this age taking part. Just under a third of adults had visited a sports centre in the last three months, albeit the proportion declined considerably with age, from 49% of 16 to 24 year olds to only 11% of people aged 60 or over.

Participation also varies by socio-economic group. Among people in the professional group, 82% had taken part in some form of physical activity in the previous four weeks compared with only 48% of those in the unskilled manual group. Church (1997) further informs us that according to the Sports Council's "Young People and Sport in England" survey, only 2% had taken part in none at all. However, the amount of time spent on such activities ranged from less than one hour to over 15. On average, children had participated in ten sports at least once outside of lessons in the 12 months leading up to the survey, but only four sports at least ten times in the year. Boys tended to participate in more sports outside of lessons than girls and they also spent more time on sports than girls. Boys tended to participate in a wider range of sports than girls and were especially likely to take part in team games.

3.1.8 Higher Education

The term higher education is utilised to describe education above A-level, including Advanced Higher grade and its equivalent, which is provided in universities and colleges of higher education and in some further education colleges.

The Further and Higher Education Act 1992 and parallel legislation in Scotland removed the distinction between higher education provided by the universities, which were funded by the Universities Funding Council (UFC), and that provided in England and Wales by the former polytechnics and colleges of higher education, funded by the Polytechnics and Colleges Funding Council (PCFC), and in Scotland by the former central institutions and other institutions funded by central government. All are now funded by the Higher Education Funding Council for England, Wales, and Scotland. Other provisions brought the non-university sector in line with the universities, allowing all polytechnics and other higher education institutions which satisfy the necessary criteria to award their own taught course and research degrees and to adopt the title of university. All the polytechnics and art colleges have since adopted the title of university, but the change of name does not affect the legal constitution of the institutions.

Responsibility for universities in England rests with the Secretaries of State for Education and Employment, and in their territories with the Secretary of State for Scotland, Wales, and Northern Ireland. Advice to the Government on matters relating to the universities is provided by the Higher Education Funding Councils (HEFC) for England, Wales, and Scotland, and by the Northern Ireland Higher Education Council.

There are now 88 universities in the UK, whereas only 47 existed prior to the Further and Higher Education Acts 1992. Of the 88, 71 are in England (including one federal university), two (one a federal institution) in Wales, 13 in Scotland and two in Northern Ireland. There is an "Open" University throughout the UK which is funded by the Higher Education Funding Council for England. Most undergraduate courses at British universities and

colleges of higher education run for three years, except in Scotland and at the University of Keele where they may take four years. Professional courses in subjects such as medicine, dentistry and veterinary science take longer. Students in the UK who plan to take a full-time or sandwich course of further study after leaving school may be eligible for a grant. A parental contribution is deductible on a sliding scale dependent on income. Grants are paid by local education authorities in England, Wales and Northern Ireland, of which 100 per cent of the cost is reimbursed by central government (Whitaker, 1998).

3.2 Manchester

Manchester is located on the west side of the Pennines. It is the chief city of the north west of England. People first took to industry in Manchester. However, it is not only a place for work but also a place for leisure, sport, music, and the arts. This transformation is set to continue with work already begun on an ambitious multi-million pound project to create a new shopping and leisure quarter in the corner of the city damaged by the 1996 explosion. The city centre is still alive with cultural attractions. The fascinating Castlefield Heritage Park tells Manchester's story from Roman times with a range of museums and attractions built around the site of the world's first passenger railway station. The city centre is home to a couple more museums, six theatres and several art galleries catering for such diverse interests as fine art, classical drama, natural history and musicals. Sport is Manchester's other famous export. As well as Manchester United, the city is also host to the trophy-winning Lancashire County Cricket Club and a range of other top-flight sports teams from basketball and ice hockey to speedway and rugby. The city's sporting facilities are second to none and are set to expand in the next few years in advance of the Commonwealth Games, which will be held there in 2002. The cycling stadium is well established and work

has already begun on the construction of an athletics stadium and world-class swimming pool. Redhead (1993) state that, today, Manchester is surrounded by more than monuments of natural beauty. Their history is their response to it. He quotes AJP Taylor as follows:

Manchester is the only English city which can look London in the face, not merely as a regional capital but as a rival version of how men should live in a community.

According to Whitaker (1998) Manchester (the Mamucium of the Romans, who occupied it in AD79) is a commercial and industrial centre with a population engaged in the engineering, chemical, clothing, food processing and textile industries and in education. Banking, insurance and a growing leisure industry are among the prime commercial activities. The city is connected with the sea by the Manchester Ship Canal, opened in 1894, 35.5 miles long, and accommodating ships up to 15,000 tons. Manchester Airport handles 15 million passengers yearly.

The principal buildings are the Town Hall, erected in 1877 from the designs of Alfred Waterhouse, together with a large extension of 1938, the Royal exchange (1869, enlarged 1921); the Central Library (1934); Heaton Hall; the 17th -century Chetham Library; the Rylands Library (1900), which includes the Althorp collection, the University precinct, the 15th -century Cathedral (formerly the parish church), the G-MEX exhibition centre and the Free Trade Hall. Recent developments include the Manchester Arena, the largest indoor arena in Europe, and the Bridgewater Hall. Manchester is the home of the Hall Orchestra, the Royal Northern College of Music, the Royal Exchange Theatre and seven public art galleries. Metrolink, the new light rail system, opened in 1992.

Sir John Clapham said:

'It is not surprising that Britain's foreign trade presented itself almost as a problem in cotton, or that Manchester claimed a great share in the determination of the commercial- and industrial and social-policy of the country'.

Chaloner (1962) stated that the gradual triumph of the motor-car from the 1890s onwards further modified the structure of Manchester's industry, and by 1914 Manchester engineers were producing many types of petrol-driven vehicles.

The development of healthcare involved a cross-Manchester collaboration including The University of Manchester, Central Manchester Healthcare Trust, Salford Royal Hospital Trust and South Manchester University Hospital Trust, receiving enthusiastic support from the North West Region. The achievement is a clear demonstration that the Government's key themes of collaboration, partnership and clinical excellence are already being applied for the benefit of the health of the people of the North West. It will result in new treatments and better patient care which will benefit all the people of the North West (Manchester university press, 1998).

According to the April 1991 census the area of Greater Manchester is 1,286 (in sq. km) and its population is 2,499,441.

Jun to September are often some of the brightest and pleasantest months in Manchester and most of the rest of the year is gloomy and rainy.

The temperature in Manchester is in January is 41° F (5 ° C), and, in July, 62 ° F (16.5 °C). Annual rainfall is 34.1" (853mm) (British Association).

3.2.1 The University of Manchester

Manchester University, founded in 1851, had its origins in Owens College which began as a house in Quay Street for sixty-two students. It developed into the Victoria University of Manchester, whose purpose was to bring the new world of science and technology into the old world of liberal education. The essential elements in the City Plan of 1946 were:

- a) an academic area of 60 acres comprising a rectangular block of land on each side of Oxford Road
- b) a new area of 18 acres on the west side of Oxford Road running up to Whitworth Park for the development of Halls of Residence.
- c) In addition 24 acres were zoned for Halls of Residence in Fallowfield. (Knowles, 1962)

Today, the university has an international reputation, and over the years, many of the major advances of the twentieth century have begun here. The work leading to the splitting of the atom was carried out here by Rutherford. The first stored programme computer in the world was built at Manchester University by Freddie Williams and Tom Kilburn in 1948. It was here that the father of modern chemistry, John Dalton, taught the father of modern physics, James Joules and their successors now adorn one of the biggest university precincts in Europe (Redhead, 1993). Still, at the forefront of new discovery, the university continues to attract substantial grants from the Government, Europe and major international companies to carry out pioneering research in the sciences, medicine, social sciences and the arts. According to the Manchester University Press (19, January, 1998) when complete, the new hi-tech centre will be dedicated to high quality patient-orientated clinical research involving all the healthcare professions-doctors, nurses, physiotherapists and other professions allied to medicine. It will include research beds for in patients, areas for research, outpatient clinics and associated research laboratory and investigation space. The Manchester bid beat off competition from top academic and medical centres in the UK. This achievement is a national and international vote of confidence of the quality of science in Manchester and a recognition of the established links between clinical and basic science. The Centre will be a key building block in the scientific infrastructure, that will ensure that Manchester moves into the new century as one of the leading clinical research centres in Europe. As expected from a University with such a fine reputation, it has some of the best

facilities to be found anywhere. It boasts the John Rylands University Library, one of the finest academic libraries in the UK, the prize winning Manchester Museum and the superb Whitworth Art Gallery, all on the University campus. The Radio-Astronomy Centre at Jodrell Bank is also a part of the University. It has also a very compact campus, less than half a mile from the city centre. A mixture of original Victorian buildings and more modern constructions such as the Maths Tower and the Information Technology Centre sit comfortably alongside each other. The main road running through the centre of the campus links the University with the city and the area south of the city, where the majority of the student accommodation lies. The splendid John Owens Building, which houses the university administration, is the central building on the campus. From here, it is only a short walk to all the main facilities including the Students' Union, the Library, the Refectory and all the academic departments. The library has invested heavily in the most advanced electronic information resources, which it distributes across the campus via the computer networks. It is possible to access CD-ROMs and nationally -loaded databases and there is, of course, access to the World Wide Web and the numerous other resources available via the internet. All these electronic information services are available 24 hours a day and can be accessed from the PCs in the library, or remotely from terminals in departments. The University's computing facilities, supplied by Manchester Computing, are at the forefront of computer technology. An extensive network provides user access to a wide range of information services across the campus, within departments and on a national and international basis. All students are automatically registered for Email.

At the heart of the campus, there is a wealth of recreational and welfare facilities. The Students' Union provides a range of welfare and advice services, as well as a lively programme of social events, and many societies which one can join. The first semester in the academic calendar is from September to January and the second is from February to June. The University of Manchester has 20,418, students (table, 3.1) and 7,685 academic

and non-academic staff members (table, 3.2). Academic weekdays are from Monday to Friday.

3.2.1.1 University Calendar

Academic Semesters

There are two academic semesters each year. The first semester lasts from September to end of January, second semester lasts from February to June. There is a three week vacation called Easter.

Table 3-1

Demographic of Manchester University Students 1996-97. December 96 Registrations

SUM OF TOTAL		FEMALE		FEMALE TOTAL	MALE		MALE TOTAL	GTAND TOTAL
Faculty	UG/PG	FT	PT		FT	PT		
Arts	PG	172	171	343	184	130	314	657
	UG	2923	102	3025	1926	72	1998	5023
Bio Sciences	PG	162	44	206	139	39	178	384
	UG	540	0	540	342	0	342	882
CDCE	PG	26	96	122	12	37	49	171
	UG	0	332	332	0	154	154	486
Dentistry	PG	8	28	36	17	24	41	77
	UG	169	0	169	218	0	218	387
Economics	PG	187	102	289	233	99	332	621
	UG	750	26	776	821	13	834	1610
Education	PG	362	336	698	257	113	370	1068
	UG	276	138	414	75	17	92	506
IDPM	UG	6	0	6	20	0	20	26
Law	PG	31	3	34	29	6	35	69
	UG	336	0	336	238	0	238	574
MBS	PG	80	50	130	268	53	321	451
Medicine	PG	206	256	462	166	258	424	886
	UG	777	0	777	720	0	720	1497
Science and Engineering	PG	170	106	276	525	201	726	1002
	UG	1173	0	1173	2868	0	2868	4041
Grand Total		8354	1790	10144	9058	1216	10274	20418

Notes: Excludes year out and intercalating students.

Includes visiting and exchange students.

Excludes Gateway House Nurses and Midwives.

Excludes dirty data.

Source: Mike Gibbons, Manchester University Student Records Officer, April 1997.

Table 3-2**Demographic of Manchester University Staff 1997**

Staff Member	Male	Female	Total
Academic Staff	1168	352	1520
Non-Academic Staff	2311	3854	6165
Total	3479	4206	7685

Source: Richard Seeley, Manchester University Personnel Records, April 1997.

3.2.1.2 Sporting Facilities

There are many activities to choose from, some of which are organised by the University's Directorate of Sport, and others by the Athletic Union. There are two large centres, the McDougall Centre, which is the main campus recreation centre with a swimming pool amongst other facilities, and the Armitage Centre, a large modern indoor centre next to the Student Village at Fallowfield. Just about every sport one could wish to participate in is catered for here. The University 's sporting scene has something to offer everyone, whether one is interested in competing or just keeping fit. As well as the recreation facilities on and around the campus, such as the swimming pool, squash courts, and fitness rooms, there is a huge programme of competitive sport organised by the Athletic Union. Much of the activity is organised around the two indoor sports centres, the McDougall Centre on the main campus, and the Armitage Centre which is in Fallowfield, near to the main student area. These two centres, and the programme of activities within them are managed by the Director of Sport and his deputies.

The McDougall Centre is the University's recreation centre on the main campus and was one of the first multi-purpose sports centres in Britain. Facilities include a swimming pool, a 29m by 27m sports hall, marked for basketball, badminton, volleyball, netball and tennis, a small gymnasium for keep fit, dance, judo, fencing and multi-gym, a fitness room, four

squash courts, an outside court for five-a-sided football or tennis, a rifle range, a climbing wall, and a sauna and sunbeds.

Recreation courses are run each term at beginners' and advanced level. They currently include aerobics, badminton, ballet, circuit training, dance exercise, keep-fit, step classes, relaxation, squash, swimming, self-defence, kick boxing, weight training, and yoga. There is a charge for admission to the centre, but this is kept as low as possible. Equipment is also available for hire.

The Armitage Centre is a large, modern, indoor sports centre. Its facilities include a flexible sports hall for badminton, basketball, volleyball, tennis, netball, five-a-side soccer, hockey, archery, and indoor cricket, and a new fitness suite. There are four squash courts close by. There is, a charge for admission and a booking system, as the centre is also a major conference and exhibition venue. Facilities may be restricted at certain times.

The 31-acre First Athletic Ground, adjacent to the Armitage Centre, provides pitches for football, rugby, hockey and lacrosse, netball courts, two five-a-side pitches, four tennis courts, a cricket square and nets, two artificial turf pitches, and a large pavilion.

Further away from the campus is the 90-acre Wythenshawe Sports Ground, which is used by hall, society and departmental teams, as well as Athletic Union clubs. There are rugby, hockey and soccer pitches, three cricket squares and a large pavilion. Many Halls of Residence also have their own sports facilities such as, Hardly Farm and Hulme Hall.

3.2.1.3 The Athletic Union

The Athletic Union, which is run by students, is one of the oldest and most prestigious student sports unions in the country. It organises most competitive sports and recreational sport, including the elite and specialist clubs, and the facilities for sailing. Each club runs a number of teams. It even has a sports information service for those wishing to participate in interesting minority activities, such as tandem parachuting.

The clubs currently in the Athletic Union are: Archery, Association Football (men and women), Badminton, Basketball, Boat, Canoe, Cricket, Cross-country, Cycling, Fencing, Fives, Golf, Hockey, Jiu Jitsu, Judo, Karate (Shotokan), Karate (Wado Ryu), Kortball, Lacrosse, Lawn Tennis, Mountaineering, Netball, Orienteering, Pistol, Riding, Rifle, Rugby League, Rugby Union (men and women), Ski, Speleogy, Squash, Sub-Aqua, Swimming/Waterpolo, Table Tennis, Tennis, Ten-Pin Bowling, Trampoline, Volleyball, and Yacht.

Sports bursaries are awarded by the XXI Club, which was founded in 1932 and includes the most outstanding sportsmen and sportswomen who are attending or have attended the University.

CHAPTER FOUR

IRAN

4. General Background

4.1 History and Politics

Iran is one of the oldest civilised countries in the world with arts, literature, poetry and governmental organisation dating back to more than 2500 years ago.

In the English-speaking world, the country was known as “Persia” until 1935 when the name “Iran” was officially adopted. As Badie (1983) states, the mountains, seas, and desert frontiers of Iran have never been great barriers to human movement.

Iran was ruled from the end of the 18th century by Shahs of the Qajar dynasty. In 1925 the last of the dynasty, Sultan Ahmad Shah, was deposed in his absence by the National Assembly, which handed executive power to Prime Minister, Reza Khan. Reza Khan was elected Shah as Reza Shah Pahlavi by the Constituent Assembly in December 1925. In 1941 Reza Shah abdicated in favour of the Crown Prince, who ascended the throne as Mohammad Reza Shah Pahlavi.

In January 1979, the Shah left Iran, handing over power to the Prime Minister, who was ousted by Ayatollah Khomeini, the spiritual leader of the Shia Muslims, on his return from exile. Following a national referendum, an Islamic Republic was declared on 1 April 1979. A new constitution, providing for a president, prime minister, Consultative Assembly, and leadership by Ayatollah Khomeini, was approved by referendum in December 1979. In June 1989 Khomeini died and president Khamenei was appointed Leader of the Islamic Republic.

Regarding the political system of Iran, the leader of the republic is elected by the Council of Experts whose 83 members are popularly elected every eight years. The president, who is the chief executive, is directly elected for a four-year term and may only be re-elected once. Ministers are nominated by the president and must obtain a vote of confidence in the Majlis. The Majlis comprises 270 representatives who are directly elected for a four-year term. Laws passed by the Majlis must be approved by the 12-member Guardian Council (Whitaker, 1998).

4.1.1 Economy

The economy of Iran is mostly dependent on oil, but there is also some export of iron, steel, carpets and so on. A development plan has been running since 1989. Early in 1991, about 70% of industry was state-owned, much of it nationalised after the 1979 revolution, but the government is now committed to partial privatisation. Strategic heavy industry will remain in the state sector. A stock exchange re-opened in Tehran in 1992. Agricultural output rose following the end of the Iran-Iraq war, and an attempt is being made to reduce dependence on food imports. Wheat is the principal crop; other important crops are barley, rice, cotton, sugar beet, fruit, nuts and vegetables. Wool is also a major product.

The oilfields, which lie in south-western Iran, were nationalised in 1951. From 1957 until the 1979 revolution a consortium of eight foreign oil companies was responsible for the production, refining and sale of oil but in July 1979 the National Iranian Oil Company assumed full control, Oil production was 180,911,000 tonnes in 1995.

Apart from oil, the principal industrial products are carpets, textiles, sugar, cement and other construction materials, ginned cotton, vegetable oil and other food products, leather and shoes, metal manufactures, pharmaceuticals, motor vehicles, fertilisers and plastics (Whitaker, 1998).

With respect to weights and measures the metric system is in force.

The Iranian year is a solar year running from 21 March to 20 March

4.1.2 Area and Population

Iran is bounded in the north by the Caspian Sea and the former Soviet Republics of Armenia, Azerbaijan, and Turkmenistan, in the east by Afghanistan and Pakistan, in the west by Iraq and Turkey, and in the south by the Oman Sea and the Persian Gulf. The capital city is Tehran with a population of 6,042,584 according to the 1985 census. Tehran, has a further 3 million people within its suburbs. Iran is a member of the UN, OPEC and the Colombo Plan. Political, administrative and economic power are centralised in Iran. The country consists of 24 provinces (ostan), which are sub-divided into 195 counties.

Covering an area of 1,648,195 sq.Km, the country is five times larger than England. It is mostly an arid tableland, encircled, except in the east, by mountains, the highest in the north rising to 18,934 ft. The central and eastern portion is a vast salt desert. Iran had an estimated population of 66 million in 1995. There were approximately 2 million refugees from Iraq and Afghanistan in 1992.

The average population density is only 33.9 per sq.Km.(Census 1992). Nearly sixty per cent of population are in rural and forty per cent are in urban. Nearly eighty per cent of recreational sporting facilities are in urban and mostly are in big cities such as Tehran, Esfahan, Mashhad, Tabriz, Shiraz and Ahvaz.

4.1.3 Climate

Generally, Iran has a desert climate, but there are more temperate conditions on the shores of the Caspian Sea. The seasonal range of temperature is considerable: in Abadan from 12.2 degrees C. in January to 36.1 degrees C. in July, with annual rainfall 204 mm; in Tehran: from 2.2 degrees C. in January to 29.4 degrees C. in July, with annual rainfall 246 mm (Baiat, 1989).

The climate ranges from warm in the south and east to cool and cold in the north and west respectively.

The temperate climate provides geographical determinants conducive to a broad range of sporting and recreational opportunities.

4.1.4 Religion

The main religion is Islam and 99 per cent of the population are Muslims. About 91 per cent of the Muslims are Shia and 8 per cent are Sunnis. There are also small religious minorities of Armenian and Assyrian Christians, Zoroastrians, Jews, and Bahais.

The national language is Persian, or Farsi, as it is called in Iran. Persian (Farsi) is an Indo-European language with many Arabic elements added. The alphabet is mainly Arabic, with writing from right to left. Persian was spoken by 45% of the population in 1986. 28% spoke related languages, including Kurdish (9%) in the west and Luri in the south west, Gilaki and Mazandarani in the north and Baluchi in the south-east; 22% spoke Turkic languages including Assyrian, mainly in the north-west. Armenian is also spoken in the north-west, and Arabic in the south, (Whitaker, 1998; Badie, 1983).

Islam

Islam is an ideology based on the Holy Quran (revelations from God to the Prophet Mohammad -s) and the Hadiths (the sayings and practices of the Prophet Mohammad -s) “Deen” which is usually regarded as equivalent to the English term “religion” embraces a concept which includes, in addition to these concepts and practices customarily associated in Iranian minds with religion, a wide spectrum of practice and ideas which influence almost every aspect of the daily life of the Muslim individual. Alcohol, gambling and dancing are forbidden in Iran because of the religion (Islam).

According to Falsafi (1982) the history of Islam has shown that its greatest leaders always encourage believers, especially those of the younger generations to be creative and engage

in movement. The Prophet of Islam Mohammad (peace be upon him) emphasised that believers should learn and do physical activities during leisure time; he has even recommended that “you should learn swimming, horse-riding and shooting and you should teach them to your children”; those activities were popular activities in that time. He also encouraged believers to play and keep themselves healthy, because he believed that people must be free. Further, he stressed that the best believers are those who are kind and respect others and he added if you neglect health and sport, undoubtedly, ‘the devil’ will corrupt your morals.

Other Shi-ah leaders have also commented on leisure activities:

- a) Imam Ali stated “a large number of people lose the value of two blessings and do not mind their importance: health and leisure time.
- b) Imam Bagher stated “to keep away from laziness and the state of being impatient, both are origins of any sort of evil”.
- c) Imam Sadegh Imam Reza and Imam Mosa Kazem have encouraged trying “to divided your daily time to different part, each allocated to different affairs: some hours should devoted to praying, some hours to make money, some hours to chatting with friends and some hours sparing for leisure.
- d) Imam Sajad and Imam Mosa Kazem have suggested that believers should do some physical activities for their health. Imam Ali has also said that entertainment is conducive to happiness and then you can work and think better because when you are healthy and happy you are more effective in your social and economic activities.
- e) Imam Reza has also suggested that entertainment and physical activities can change your daily life after lengthy help overcome tiredness and Borden. Moreover, Ayatollah Khomeini (the first leader of the Islamic Revolution), said “Athletes should do spiritual exercise in the same way as they do physical exercise”. He also said that “the sports which are in the service of humanity are considered to be among the fundamental requirements of a society. Hojjatolislam Hashemi Rafsanjani (the former President of Iran, 1997), has suggested that “doing exercise and building a healthy body characterises a believer.

Dr. Hashemi Golpayegani (former Minister of Culture and Higher Education) in the first Islamic Countries "University Students" Solidarity Games in Tehran (1994), emphasised "the significance of sport in the view of the Islamic Republic of Iran, and pointed out that it serves man to contribute to the promotion of this existential dimensions, helping him to be perfect. That is the reason why our men of wisdom have always emphasised that 'a healthy mind can be found in a healthy body'. Islamic culture also gives particular attention to the flourishing of both body and soul and thus confirms the importance of sport to the extent that it firmly recommends learning particular sports, such as shooting, horse-riding and swimming". Islam has supported the usefulness of sports and activities.

The daily Muslim duties are to pray five times a day (at dawn, at noon, in the afternoon, in the evening, and at night). This involves standing, bowing and kneeling on the ground (including bowing the head to touch the earth or *Mohr*). This regular daily exercise makes considerable demands on the body and is conducive to an element of physical fitness. In Iran as in other Muslim countries there are Friday Prayers which are held every Friday at noon accompanied by speeches on religion, politics and morality, in all cities and villages. Another aspect of Islam is fasting. Every year during the month of Ramadhan, Muslims must fast from dawn to sunset, which means they are not allowed to eat and drink unless there is a good reason such as illness or ageing. According to Hayat (1984), fasting makes the blood circulate better; it purifies the body and helps get rid of waste materials; it also helps reduce high blood pressure: a further aspect of fasting, according to Islamic philosophers, is self control because every year for one month we avoid everything which God put at our disposal. During Ramadhan all national games are cancelled, official physical activities and also swimming are cancelled (during the day). During the Ramadhan nights in Iran, there is a special programme which varies, depending on region or province, because of the climate and their popular sports such as five side football indoor and outdoor, volleyball, basketball and so on.

Another aspect of Islam is the pilgrimage. Muslims who can afford to, go to Mecca once a year during the month of the *Al-Hajj*. There are many tasks to do such as standing in Arafat.

Every pilgrim has to stay the whole day until sunset. The pilgrims are also required to circle the Kabah in Mecca, on foot seven times, several times during the period of Al-Haj. Moreover, Muslims have to walk and jog back and forth seven times between Safa and Marwa, almost two hundred metres each way.

Since the Islamic Revolution in Iran, which will be discussed later, gender difference is important in all aspects of life in Iran, as in other Islamic countries. For instance, apart from at the kindergarten stage, males are educated separately from females. Gender differences are also reflected in the field of leisure and sport. Females should exercise indoors unless covered and should not be seen by males. Females in Iran are not allowed uncovered in public but they are allowed to participate in social activities and work and so on as well as males.

Shi-ah Islam

The term *shi-ah* which literally means followers, party, group, associate, partisan, or supporters, occurs a number of times in the Quran, for instance in surahs 19.69, 28.15, and 37.83. Technically the term refers to those Muslims who derive their religious code and spiritual inspiration, after the Prophet, from Mohammad's descendants, the *ahl al-bayt*. The focal point of Shiism is the source of religious guidance after the Prophet; although the Sunni accept it from the *sahabah* (companions) of the Prophet, the *Shi-ah* restrict it to the members of the *ahl al-bayt*. This pivotal point, which distinguishes *Shi-ah* from Sunni Islam, is based on two important factors: one sociocultural and the other drawn from the Quranic concept of the exalted and virtuous nature of the families of the prophet.

The question of succession to the Prophet thus became involved with the vision of the leadership of the Muslim community, with different approaches to and varying degrees of emphasis on its political and religious aspects. To some it was more political. The majority of Mohammad's companions, with their north Arabian background, conceived the function of his successor in terms of safeguarding the community's political character and of

propagating the message of Islam beyond its Arabian origin, conceived the succession in terms of Mohammad's spiritual authority. They believed that the divine guidance had to continue through his successors, who should combine in themselves the Prophet's religious as well as temporal functions. Such leaders were the Imams, who inherited the mantle of the Prophet in providing the revealed guidance for the creation of the Islamic order (Esposito, 1995).

Modern Shi-ah Thought

The intellectual dimension of Shiism has a long and varied history that includes political, juridical, theological, philosophical, and mystical traditions. Although practically all these branches of Shi-ah learning have continued and flourished to the present time, it is only the political dimension of Shiism that has significantly responded to the issues and problems posed by modernity. The metaphysics of "reason" and "progress", defining the claims of "modernity" on its history, came into direct and radical conflict with the Islamic metaphysics that has doctrinally sustained and legitimised Shiism as a world religion. As a result, even the non-political dimensions of Shiism, for example its juridical and philosophical traditions, responded to modernity with a fire and tenacity indicative of their political and not necessarily juridical or epistemological crisis. Consequently, such issues in Shi-ah juridical and philosophical discourse that do not address their problems in modern terms remain principally premodern in the terms and dispositions of their engagement. Arjomand (1988, p 10-11) has warned against confusing of Shi-ah political culture with the political culture of the Shi-ah. The historically evolving political culture surrounding a nominal or practising Shi-ah has been a multicultural and multifaceted phenomenon which is completely impossible to reduce to particular tenets of Shiism. In fact, "Shiism" is a defining term advanced at considerable risk to historical reality. In a permanent dialogue with historical forces beyond their control, the changing sensibilities of the Shi-ah authorities have constantly redefined the received symbols of their faith. The perception of the central drama of Shi-ah faith, the martyrdom of the third Imam, Husayn, has moved from a revolutionary episode to a quietist act of piety, only to emerge yet again as a radical event in the changing configuration of the Shi-ah collective imagination. The specific components of

that collective imagination have historically responded to political and cultural forces of diverse origin and destination in the context of specific communities to the east of the Mediterranean world. Shi-ah doctrines, symbols, sensibilities, and institutions have emerged in interaction with religious, cultural, social, and political forces of Arab, Iranian, Indian, and Turkish origins. Historical communities consciously tracing themselves to such designations as Arab, Iranian, and so forth have been the material space in which Shi-ah doctrines, symbols, and institutions have been articulated in both premodern and modern circumstances, Shi-ah political thought has thus been produced in dialogical response to external material forces.

The rising tide of modernity in the 1930s and 1940s, which in political terms ultimately led to the establishment of the Pahlavi state apparatus, also witnessed a contrapuntal mode of reform in Shi-ah political thought. Mirza Reza Quli Shariat Sangalji (1890-1944) is the chief representative of a rather radical notion of modernity and tried to advance such subversive ideas as the total discarding of the institution of *taglid*, or the “emulation of the exemplary conduct of the religious authorities” (see Bigdili, 1944; and Richard, in Arjomand, 1988, chap. 7).

The 1950s also gave rise to a re-emergence of nationalism in Iran, a movement championed by Mohammad Mossadegh. It was to nationalism that Shi-ah political thought responded in the 1950s. Ali Akbar Tashayyud was chiefly responsible for an active co-ordination of Shi-ah doctrines with the dominant themes of nationalism in the 1950s. While Tashayyud tried to assimilate nationalism into Shi-ah political thought, Sayyid Mahmud Taleqani (Taleqani, 1910-1979) sought to give an active rereading of such key Shi-ah figures as Naini and Kharaghni by posing Shiism as an alternative to nationalism (Dabashi, 1993, chap. 3).

The greatest and most effective challenge to the authority of the “*ulama*” as an institution, however, came from Ali Shariati (1933-1977). In the 1960s and 1970s. Shariati single-handedly reimagined a whole new, radically active spectrum for Islam. In a series of effectively delivered public lectures and persuasively written essays, Shariati generated an unprecedented energy and enthusiasm among politically committed intellectuals with a religious bent (for samples of his works in English, see Shariati, 1979, 1981, 1986).

Educated in Mashhad and Paris, Shariati mastered an effective repertoire of rhetorical

devices and then returned to his homeland, fully committed to transforming Shiism into a fully fledged political ideology.

By far the most erudite, systematic, and relentless ideologue who carried the revolutionary potential of a repoliticised Shiism to its logical conclusion was Murteza Motahhari (1920-1979). His philosophical preoccupation with historical materialism and his concerns with popularising a more readily accessible and politically relevant Islamic philosophy were largely indebted to his close association with Allamah Sayyid Mohammad Husayn Tabatabai (1903-1981), a distinguished Shi-ah scholar who was equally concerned with the erosion of Islamic doctrines and ideas. In his major philosophical contribution to the active engagement with Marxism, and historical materialism, *Usul-e falsafeh va ravesh-e realism* (1953-1985), Tabatabai took issue with those pervasive ideas. His concern was primarily for the seminary students in Qum who had apparently been drawn to radical, secular ideas (for a sample of Tabatabai's writings, see Tabatabai, 1989). However, Mutahhari's extensive commentaries on these texts made them accessible to more secular students in Tehran University. Throughout his Qur'anic commentaries and his participation in the question of supreme juridical/political authority among the Shi-ah and a host of related issues, Tabatabai actively participated in his generation of high-ranking clerics' concern with the rise of Marxism, historical materialism, secularism, and ultimately the future of the Shi-ah faith and its social and political contexts (see Dabashi, 1993, chap, 5).

To address the specifics of those social and political contexts in a language that bore the sacred authority of the Quran, another major political thinker of this period, Sayyid Mahmud Taleqani, used the discourse of Qur'anic commentary as his preferred narrative. Through a succession of Qur'anic commentaries, published later as *Partuvi az Quran* (1979-1983), Taleqani read an actively revolutionary message into the Islamic holy text. In and out of prison for his political activities over an extended period of time, Taleqani preached his radical, revolutionary reading of the Quran, linking its sacrosanct message to the most immediate and compelling problems of his time. Taleqni felt equally compelled to fight Marxism, especially its economic theory. He wrote a book, *Islam and Ownership* (1953; for an English translation, see Taleqani, 1983), in which he countered the Marxist

conception of the economic basis of social structure and then assimilated its principal terms and discourse in narrating an Islamic political economy (see Dabashi, 1993, chap, 4).

Mehdi Bazargan (the first transitional prime minister after the fall of the Pahlavi regime in 1979), Taleqani and a number of other Muslim activists established the Liberation Movement of Iran (see Chehabi, 1990).

By far the most rhetorically successful revolutionary, Shi-ah was Ayatollah Khomeini (1902-1989), who ultimately engineered the downfall of the Persian monarchy. Born in the small village of Khomein (Khumayn), near Tehran, Ayatollah Khomeini grew up in the immediate aftermath of the Constitutional Revolution, which ushered in the rapid institutionalisation of modernity in Iran. He received his early education in Khomein and Arak and then moved to Qom to pursue his higher scholastic studies, where he was even more aggravated by the rise to power of the Pahlavis and the even more rapid dissemination of politically mandated modernisation. Ayatollah Khomein watched with visceral contempt the Shah's absolutist rule in the late 1950s and early 1960s. Khomeini's 1963 uprising against the Shah was based on decades of resentful deliberation in religious and political terms. The increasing secularisation of Pahlavi society and the American domination of Iranian political, social, economic and cultural life were the principal points of contention that moved Khomeini to open revolt. After the June 1963 uprising and exile, Ayatollah Khomeini launched a major campaign against the legitimacy of the Pahlavi regime and that of the monarch's authority. The principal text that was produced in this period was *Velayat e faqih* (1970), in which Ayatollah Khomeini defined the principal doctrines of his Islamic government (for a translation, see Algar, 1981). The major thesis of *Velayat e faqih* is quite simple: the Islamic government established by the prophet Mohammad and (according to the Shi-ah) continued by the Imams was not meant to be a transitional government. In the absence of the Twelfth Imam, who is now in occultation, the world is plunging deeply into corruption and despair. The Shi-ah cannot know exactly when the Twelfth Imam is to appear. In the meantime, the responsibilities of leading Muslim nations cannot be entrusted to corrupt and tyrannical rules like the Shah, who simply aggravate the situation because they are deeply corrupt themselves. At this point, Ayatollah Khomeini accumulates a series of Qura'nic passages and prophetic traditions that he interprets to mean that the (Shi-ah)

jurists are to assume power, because, by virtue of having access to the specifics of the sacred law, they know how to regulate the daily affairs of Muslims in a way that assures their salvation.

4.1.5 Recreational Sporting Activities

Strength makes one honest and erect

Infirmity generates dishonesty and defect

(Ferdosi, AD, 939-1020)

Wrestling is a display of human beauties. It is the representation of man in action. This is the same definition Aristotle had used to define drama. Wrestling is not a play activity. It requires fantastic strength. Gilgamesh, the Sumerian epic work dating from 3,000 B.C, describes Gilgamesh wrestling against Ikido. A sport with such a rich background can never be forgotten under the dust of the passage of time. Wrestling was practised in ancient Greek and Roman times. It has suffered a loss in popularity due to the recent developments in sports such as football, gymnastics, athletics, baseball, and basketball characterised as being “fun”. However, with the current return to traditional values, the sport is enjoying renewed recognition (Karimi, 1985).

One should seek the background to the current sporting activity and the love of sports in Iran in that country’s history. At the time when the two Empires of Iran and Rome were rulers of a large part of the world, they surpassed others in the world of the time in civilisation and culture. In those days, sports also constituted one of the important elements of culture and civilisation among Iranian as in any nation and, as such, enjoyed a conspicuous and important place.

Just as the history and civilisation of the west is divided into distinctive periods by the coming of Christ and the appearance of Christianity, the history of Iran and its civilisation is divided into pre-Islamic and post-Islamic periods by the coming of Mohammad (s), the last of God’s prophets, and the appearance of Islam.

As the historical evidence testifies, this is not merely a feature of the calendar in either Islam or Christianity, but specifically marks the origin of a deep evolution in all aspects of human endeavour in politics, economics, culture and even of sports and a love of sport. In short, everything enjoyed a celestial aspect and was spiritually promoted. Particularly under Islamic justice and blessing, and with the importance given by Islam to culture, morals, and learning, the Moslems enjoyed an extraordinary evolution of culture and spirit. The repeated emphasis given by the Holy Quran, Mohammad (s) and the Innocent Imams' Shia (e) to physical and spiritual education and the need for all Moslems to acquire power and a healthy mind and body, as well as the participation of the Prophet (s) and his family in sports events of those days such as archery, horse-riding and wrestling... and the encouragement given by the peers of religion in taking part in physical activities were all important reasons for the expansion and development of sports among Moslems, in particular in Iran. However, the interesting point is that in Islamic teachings sports events have been considered from the very beginning not only to provide physical education and bodily health, but also to answer the need to acquire moral qualities and spiritual righteousness by avoiding sin (Fathi, 1992).

The evidence existing about sport and its place in the educational discipline of the Iranians reveals the fact that, from most ancient times, long before the appearance of Islam in Iran, the Iranians paid particular attention to the physical education of themselves and their children. Zoroaster, as the most important spiritual leader of the pre-Islamic Iranians says in one of his teachings:

"Among five wishes that every being asks Ahouramazda (God in Zoroastrians belief) is first going to heaven and second strength in body". He also said: "Each girl wishes to marry an agile and strong man to produce strong children".

As Herodotus the famous Greek historian, states:

"The Iranians had their children trained from the age of 5 to 20 in three disciplines namely horse-riding, archery and truthfulness".

This, among other pieces of evidence, reveals that, from the outset in Iran, there was a strong association between spiritual education and the learning of physical exercise. From

the time of antiquity, sport and moral responsibility were regarded as twin pursuits.

Professor Adolph Rein in his book entitled: "Iranian Religion and Customs" writes :

"that which is most interesting in the ancient era and reveal the spiritual spirit of Iranians in their social life is their educational method so attracted the Greek that ever since the time of Herodotes (5 th. Century B.C.) they learnt that method from the Iranians and disseminate it in Greece".

Also Plutarch says: *"In Iran courage and proportionate body are considered virtues which they acquire through sport and add to their handsomeness"* and elsewhere he also says:

"the Parsi (old name of Iranian) youth from the age of 16 learn how to use bow, arrow, and dart".

Plato writes: *"the Parsies pay full attention to make their children stronger through sports"*.

Ancient Greek historians, including Xenephone in his "Curopeadia", wrote about prevalent sports such as jumping, hunting, rolling ball (Gooybazi), swimming, hiking, archery and so on, in which, after being trained, individuals would be distinguished as chosen champions and would receive the title of "Grodak", meaning a brave youth or a young champion (Sadri, 1961).

Polo and wrestling were among the most prevalent sports in ancient Iran and in these sports as in other activities, the ultimate objective was to enable people to fight effectively in battle. Wrestling was used, in the last resort, as a hand to hand struggle with the opponent in order to overcome him. Some writers noted that many sports such as polo, wrestling, archery, fencing, and hockey were invented in Iran (Javid, 1971). A paper written in 1961 in University of Cologne in Germany says that the root of the Olympics lay in Iran.

The invention of such sports items, as the bridle, the horseshoe, the saddle, and the foot rest led to polo which found its way to Greece and later to Rome, becoming in turn the origin for golf and cricket. Professor Diem has commented that:

"the originality of ancient Iranian sports were such that I included the ancient Iranian sports in the sports syllabus of German sport".

Thus, to summarise, the background to the Iranian's love of sport can be found in the cultural grandeur of Islamic civilisation. Jorji Zeidan a famous contemporary Egyptian writer in his famous book: "History of Islamic Civilisation" writes: "*the History of Islam has brought forth the new century and the ancient civilisation was ended with it*".

The Islamic civilisation which in the second century of its appearance embraced an area twice the size of Europe and inherited much from ancient civilisations laid the foundation for an overall glory of such dimensions, that, as history bears witness, the complementary scientific and industrial growth in post-Renaissance and present day civilisation owes much to the impact of Islamic culture. In the vast country of ancient Iran, which enjoyed a deep rooted and aged civilisation, sports and the love of sports were a part of their culture from the very beginning.

After the Second World War, modern sports became popular in Iran and rapidly developed across the country, particularly football, volleyball, basketball, table tennis, tennis, gymnastics, athletics and climbing. Physical education in schools and universities became compulsory, with annual competition. (Sadri, 1961).

The Iranian government has a national sport policy, and aims to increase people's motivation to become and remain active. Sport for all is fostered by a range of competitions and provides initial opportunities to practice sport in leisure time.

- competitions of the national sports federations adapted to age, performance level and local conditions;
- championships from local to national levels;
- cross country races;
- factory championships;
- running events "Jog to health" and Kilometers-running;

as mentioned above sports (physical education) lessons were an integral part of the curriculum in all schools and universities.

These lessons are related to age—related sporting ability.

- physical conditioning of endurance, speed and strength.
- perfection of coordinative abilities.
- varied application of basic movement skills and of fundamental sports skills.

and following educational aims were given priority:

- development of positive attitudes to and active participation in sport;
- habituation of pupils to good behaviour and fair play;
- encouragement of perseverance in participation;
- promotion of order, self-discipline and social behaviour.

Popular sport in Iran is football (soccer); other popular sports are volleyball, basketball for both men and women, and wrestling for men.

As will be seen, the government has a close involvement in such activities, in the public, private, and voluntary sectors. Many ministries play a part in the promotion of sport, most notably the Organisation of Physical Education and Recreational Sport Activities, which deals with sports development, sports for all and sporting excellence.

All sports associations and the National Olympic Committee which deal with sports club, districts, cities, provinces, national and international team are under this organisation. For Iranian sport: success in sport is a very important, in maintaining the nation's pride and self-esteem, lack of success leads the nation as a whole to suffer.

The Ministry of Education deals with sports competitions and development of physical education programmes for students age 6-18. Because of a shortage of facilities and an increasing population there are just two hours credit compulsory sports per week. The majority of students do not have access to good facilities and coaches. In recent years, physical education teachers have been removed from the curriculum of elementary schools

(age 6-11). Every year sport, competitions are held between regions' guidance and post-secondary schools and then cities and after that provinces.

The Ministries of Culture and Higher Education, and Health and Medical Sciences deal with the development of sport. There are two credit hours for physical education as compulsory units for all students during university studies.

Every year, sport competitions are held between Faculties of universities. Inter-university competitions is structured into three divisional levels. Every fourth year selection is made for representation in World Students' competitions.

Approximately one third of Iran's population lives in big cities which have the vast majority of facilities and opportunities, but still there are not enough facilities and opportunities for them. The rest of population lives in small cities and rural areas. Adult recreation sports are very limited because of family and employment commitments. With respect to problems faced, solutions undertaken, financial support, number of programmes and level of participation, socio-economic factors affect access to recreational sport. However, because sport for all is established in the educational system, it is available for youth, and also there are no regular programme for them. There are not enough hours in the day to satisfy the average Iranian passion by sports, physical education, and recreational activities, outdoor and indoor and land or water.

With respect to facilities and religious boys tended to participate in more sports outside of lessons than girls and they also spent more time on sports than girls. Boys tended to participate in a wider range of sports than girls and were especially likely to take part in team games.

Participation also varies by socio-economic group. Among people in the professional group, majority had taken part in some form of physical activity compared with only minority of those in the unskilled manual group. Also young people take part in wide range of recreational sporting activities than the other groups.

4.1.6 Higher Education

In state schools, education is free and compulsory for children aged 6-18. In addition to state educational institutions, there are private schools and universities. Universities and other institutes of higher education had 250,709 students in 1988-89. The Free Islamic University and the International University of Islamic Studies were set up after the 1979 Revolution.

The two Ministries responsible for most post-secondary education are the Ministry of Culture and Higher Education (MCHE) and the Ministry of Health and Medical Education (MHME). The Ministry of Education has jurisdiction over some post-secondary programmes such as primary and junior Teachers Training Colleges and Higher Institutes of Technical and Vocational Education.

It should be pointed out that only students with a High School Diploma who pass the national entrance examination (KONKUR) are entitled to continue their post-secondary studies at these institutions: This nation-wide examination serves as the general National Examination for admission to universities.

In 1989, the MCHE reported that there were over 100 institutions of higher education of which 30 were universities, 14 were university complexes and colleges, 5 were non-governmental private colleges and 36 were higher education centres and government agencies. The number of students enrolled exceeded 344,045 in 1991-92, of which 96,969 (28.18%) were women and 247,076 (71.82%) men. Full and part time, and hourly paid teaching staff numbered 14,160 and 9,216 people respectively, of whom 19,326 were men and 4,050 women. In addition, each year the Iranian government sends a number of graduate students and university teachers abroad to complete their studies in a foreign university.

At present, there are approximately 4000 sponsored students studying abroad.

The main branches of knowledge offered in the Iranian universities are natural and basic sciences, humanities, medical and health sciences, arts and literature, engineering and agriculture. The highest number of students, 25.5 per cent, was found in engineering courses. This figure is followed by 24.2 per cent for medical and health courses, 13.4 per cent for pedagogic and teachers' training, and 8.2 per cent for Literature, humanities and theology.

Since the Islamic Revolution, admission to university has remained highly competitive.

Although all universities work to full capacity, demand for post-secondary education still far exceeds supply. For example, of 752,343 applicants in the academic year 1989-90, only 61,000 or one-twelfth were admitted to various post-secondary institutions. In order to alleviate this problem, at least partly, and, in order to enable all talented, interested individuals to pursue their higher education, two measures have been taken: a) the establishment of an Islamic Azad (open) University, which does not rely on government funding and charges tuition fees; about 180,000 students in 80 towns and cities were enrolled in this university in 1988-89, studying single subjects or taking full time day or evening courses; applicants do not have to produce specific educational certificates to enter this university, but its entrance examinations match those of other universities; the certificates issued by this university are recognised upon evaluation by the Ministry of Culture and Higher Education; and b) the establishment of the Payaam-E- Noor University in 1987, to teach through "correspondence". It, too, charges tuition fees and principally aims at providing teachers and civil servants with the opportunity to continue their education. Courses are taught through television programmes and correspondence and students write examinations at local university offices.

In the state university, a full-time 'bachelor' student is normally expected to finish the degree in 4-5 years. No part-time programmes are available and there are time limits on the completion of all degrees.

Curriculum

The Ministry of Culture and Higher Education has established a system of credits for physical education, under which health and physical education is compulsory in all Colleges and Universities in Iran. The national guidelines stipulate that physical education is to be allocated four credit hours, consisting of two credit hours of physical fitness and two credit hours of sports such as football, volleyball, basketball, and so on, and that the credits are required for graduation in all four-year undergraduate programmes.

4.2 Esfahan

Esfahan, one of the most beautiful cities in the world, with a proud history and fascinating architectural heritage, is located on the fertile plain in the centre of Iran, 425 km south of Tehran. It is among the five biggest cities in Iran with an area of 197,403 square km.

According to the 1986 census, the population of *Esfahan was 986,753. A big river, Zayandeh Rood, divides Esfahan into two parts, the southern part and the northern part. In the south of the city lies the Sofe mountain (Kohe Sofe). The winter lasts about 80 days, in which time the temperature often falls below zero. It is windy in autumn but sunny during the rest of year. As Esfahan is adjacent to the desert, there is not much rain and the river is very vulnerable to drought. The annual average temperature is 15.6 C. The weather and also the river attract many people (Scherhag, 1962 and Shafaghi, 1974). For the last few years, Esfahan has had the best team in the country in basketball , handball, and table tennis. Also, the city's football, tennis, athletics, wrestling, and volleyball teams are among the top three in Iran. The city's sporting facilities are second in diversity only to those of Tehran

and are also set to expand in the next few years. For example, recently Esfahan has seen the building of an advance Olympic Village, a football ground with 100,000 seats, and many stadiums for volleyball, basketball, handball, swimming pool and so on.

4.2.1 The University of Esfahan

Esfahan University a state institution established in 1946, has a unique situation, with its campus located at the foot of the Kuh Sofe (Sofe mountain) having an area of 4.5 million square metres. It started with 100 students, but in the 1988-89 academic year, the number exceeded 10,000. At present, 16,000 students are studying at this university (table, 4.1). The university has 1,200 non- academic staff and 400 academic staff (table, 4.2).

As is the case with nearly all state universities, every attempt is made to design the courses to meet contemporary needs and to anticipate future demands, as well as to enable the students to develop a broad base of knowledge in their chosen fields.

Esfahan University now 50 years old, is considered to be one of the best educational institutions in Iran. The university has nine faculties with nearly thirty departments. The faculties are as follows:

1. Economics and Administrative Sciences
2. Education
3. Engineering
4. Foreign Languages
5. Literature and Humanities
6. Physical Education & Sport Sciences
7. Science
8. Technology
9. Evening School

The departments offer a wide range of undergraduate and postgraduate courses. At present, 70 courses are offered at undergraduate and 55 courses at postgraduate level. Each academic year is divided into two terms, each of which lasts 18 weeks. The usual length of time required to complete the course for a Bachelor's degree is four years, for a Master's degree, three years and for a Doctoral degree, three to four years.

4.2.1.1 University Calendar

Academic Semester

There are two academic semesters, the first lasting from September to January and the second lasting from late January till nearly the end of June. During the second semester there is a three weeks vacation for the Iranian holiday known as Nowrous which starts on the first day of spring each year (Iranian Calendar). The academic week is from Saturday to Wednesday

Table 4-1

Demographic of Esfahan University Students 1996-97. December 96 Registrations

SUM OF TOTAL		FEMALE		FEMALE TOTAL	MALE		MALE TOTAL	GTAND TOTAL
Faculty	UG/PG	FT	PT		FT	PT		
Humanities	PG	42	0	42	160	0	160	202
	UG	1750	0	1750	1992	0	1992	3742
Foreign Languages	PG	42	0	42	88	0	88	130
	UG	824	0	824	761	0	761	1585
Sciences	PG	58	0	58	134	0	134	192
	UG	1992	0	1992	1800	0	1800	3792
Computer & Science	PG	1	0	1	6	0	6	77
	UG	359	0	359	757	0	757	1116
Administrativ e Sciences & Economics	PG	9	0	9	82	0	82	91
	UG	450	0	450	2111	0	2111	2561
Education	PG	21	0	21	53	0	53	74
	UG	1036	0	1036	1092	0	1092	2128
Physical Education & Sports Sciences	PG	2	0	2	11	0	11	13
	UG	113	0	113	266	0	266	379
Grand Total		6699	0	6699	9313	0	9313	16012

Notes: Excludes year out and intercalating students.
Includes visiting and exchange students.
Excludes dirty data.

Source: Esfahan University Student Records Office, February 1997.

Table 4-2**Demographic of Esfahan University Academic and non Academic Staff 1996-97.**

Staff-Member	Male	Female	Total
Academic staff	363	52	415
Non-academic	709	493	1202
Total	1072	545	1617

Source: Esfahan University Personnel Records Office, February 1997.

4.2.1.2 Sporting Facilities

In the University of Esfahan, sport facilities, together with their programmes and activities are managed by the Director of Sports, a Deputy and three managers, one for each of the university's three sports centres. The first of those is the Shahid Bahramian Centre located in the north of the University. This centre has basketball, volleyball, handball and tennis courts, and a five-a-side football ground. It also incorporates the faculty of Physical Education and Sport Sciences which houses its own library, lecture and seminar rooms with personal computers, as well as tutors' studies and a secretarial office. Next to this Centre is a swimming pool.

The second centre is the Shahid Nilfroshzadeh Centre, located in the north of the faculty with basketball, volleyball, badminton, and tennis courts with two thousand seats. The third centre is a small gymnasium including fitness, weight lifting, table tennis rooms and a small room for wrestling, judo, teckvando, and karate. There are also four tennis courts, three courts for basketball and volleyball, one five-a-side football ground, and a swimming pool next to this centre. Two football grounds are located in the University's recreational centre on the main campus, making it one of the best multi-purpose sports centres in Iran. During the academic term, these facilities are used by students free of charge for four-credit compulsory sport classes. The four-credit hours consist of two credit hours of physical

fitness and two credit hours of sports such as football, volleyball, basketball and so on.

These are required for graduation in all four year programmes. These facilities are also used by students in the 'elite' and specialists' sport competitions every year. Sometimes they are used for major conferences, exhibitions and so on. Small facilities in Hall residences are also available. Iran is a Muslim country and consequently all sports activities for males are separate from those for females.

CHAPTER FIVE

Pilot Study

5. Objectives of the Pilot Study

The objectives of the pilot study were:

1. To examine the method of data collection and the sampling procedures.
2. To improve and standardise the research instrument by utilising statistical procedures.
3. To examine the construction and the organisation of the instrument, looking for problems in the design.
4. To assure the researcher that the instrument can gather the research information required in order to achieve the objectives of the main study. (see section 1.3)

5.1 Methodology

The methodology of the pilot study was mostly the same as that employed for the main study. In this section the detail of the procedures will be presented.

5.2 Method

Two samples of data were collected. Sample ES (English Students) and IS (Iranian Students) consisted of random samples at Manchester (England) and Esfahan (Iran) Universities, both of which are among the biggest universities in their respective countries. The students were undergraduates and ranged in age from 18 to 24. The data collection was carried out by the researcher (personally) in the Student Union and the faculties of each university. This was selected as the most suitable method for the following reasons:

- a) The rate of response: A lower response rate was more likely using other methods (e.g. postal survey). In order to avoid this problem, which could have significantly influenced the results, a personal collection survey was selected by the researcher.
- b) The objectives of the research: to identify components of the questionnaire which might require revision for the main study.
- c) Financial limitations: the present study was self-financed and for this reason, a self-administered survey was selected as a suitable method rather than the others, in order to avoid, for example postal expenses.

Therefore, the questionnaire was given to the students personally and they were asked to return it to the researcher in a prepared box. A hundred and eighty questionnaires (180) were distributed in each university. One hundred and sixty one responses were received from ES and one hundred and sixty four from IS, representing response rates of approximately 90% and 91% respectively. Although postal surveys in the field of recreational sporting activities participation have been utilised by many investigators, the results of the present self-administered method were satisfactory in terms of response rate which was higher than in postal ones used in previous investigations. Also this method avoided such expenses as the cost of postage.

5.2.1 The Sample

The sample for this pilot study was taken by a simple random method. Both Manchester (England) and Esfahan (Iran) Universities, each, with approximately 15,000 students, among the biggest universities in their respective countries, were selected for this purpose. In general, university students come from all parts of their own countries, which means from different backgrounds in terms of socio-economic status, social region, religion, and so on. Also they are educated young people. The students were undergraduates and ranged

in age form 18 to 24. A hundred and eighty questionnaires (180), with an equal number for male and female students, ninety (90) each, were distributed in each university.

One hundred and sixty one responses were received from ES and one hundred and sixty four from IS, representing response rates of approximately 90% and 91% respectively.

Four (4) ES and thirteen (13) IS questionnaires were not fully completed and, hence, were not subjected to analysis. The ES sample consisted of 157 individuals (n=157) of whom 49.07% were males and 48.44% females, 2% did not respond. The IS sample consisted of 151 individuals (n=151) of whom 50% were males and 42.1% females, 7% did not respond. The sample was big enough to conduct the statistical analysis that had been designed for the pilot study, i.e. factor analysis proposed by Oppenheim (1992) and DeVellis (1991), and to have confidence in the findings. As stated by Bryman and Cramer (1994), it is essential that the sample should be sufficiently large to enable this to be done reliably .

5.2.2 Constraints of the Sampling Method

The method of sampling used was one involving volunteer respondents (students) from a diversity of subjects in both Manchester and Esfahan universities. It was not a strict random method with selection from the universities' students computer lists. However, electronic lists were not easily accessible to the researcher, and, even if they had been, there would have been a need to trace the students and contact them personally or by postal survey. The method used had limitations and therefore the sample acquired was not fully representative of the student population.

5.2.3 Instrumentation

The “constraints on participation in recreational sporting activities” (CPRSA) questionnaire was designed to collect information related to the literature survey. The instrument included a list of thirty-eight (38) constraints some designed by the researcher and others taken up from the studies of Witt and Goodale (1981), McGuire (1984), Henderson *et al.* (1988), Shaw *et al.* (1991), Raymore *et al.* (1993), Hultsman (1993), Jackson and Rucks (1993) and Jackson (1993). To summarise, the subjects responded to a questionnaire that consisted of three sections as follows:

- a) **Demographic Information:** individuals were asked three questions about themselves, their gender, age, and marital status.
- b) **Recreational sporting activities participation:** they were asked two questions about participation and non-participation in recreational sporting activities in the year before which the pilot study was conducted.
- c) **Constraints on recreational sporting activities participation:** the purpose of this instrument was to collect information related to constraints on participation in recreational sporting activities. The instrument included a list of thirty-eight (38) constraints recognised both in the literature and through interviews conducted prior to the study (Witt and Goodale, 1981; McGuire, 1984; Henderson *et al.*, 1988; Shaw *et al.*, 1991; Raymore *et al.*, 1993; Hultsman, 1993; Jackson and Rucks, 1993; Jackson, 1993). It was checked using the back-translation mechanism (**Appendix A**).

5.2.4 Demographic Information

Respondents were asked to provide demographic information about their gender (males, females), marital status (single, married) and age (birth date). Their age was between 18 and 24, which placed them in the young adulthood category in both English and Iranian societies.

5.2.5 Recreational Sporting Activities Participation

Respondents were asked to indicate their participation and non-participation in the year before the pilot study (i.e., a yes or no response). Those who had dropped an activity were then asked to specify it and to evaluate thirty-eight statements of reasons for ceasing (see **Appendix A**). Although these questions did not give detailed information about frequency of recreational sporting activities participation, there was a clear division between participation and non-participation.

Such categories as these have been utilised by previous investigators (e.g., Jackson & Rucks, 1993). As proposed by Matheson (1991), it was more suitable to measure recreational sporting activities participation ordinarily in the twelve months period rather than in a one month period. Moreover, the one year reference period has been discussed by several researchers in previous studies. According to Chase and Harada (1984) and Robinson and Godbey (1993) the twelve months reference period has limitations. Since it might not always be a reliable measure for participation in recreational sporting activities, because on the one hand respondents might have difficulties in recalling events over such a long time, and on the other hand, they might exaggerate their participation. Moreover, self-reporting of participation suffers from a substantial response error, represented by a lack of relationship between reported and actual participation. As mentioned previously, the twelve months reference period has been discussed in many previous investigations, a good number of which, including these of Kelly (1990), Howard and Crompton (1984), Wright and Goodale (1991) and Jackson and Rucks (1993), utilise ordinal measure of frequency of recreational and sporting activities. This has the advantage that it captures seasonal participation, and may give a better representation of a person's participation than a four week period, which may turn out to be untypical of their behaviour.

5.2.6 Constraints on Participation in Recreational Sporting Activities

In this section of the instrument, subjects responded to thirty-eight questions which related to the nine constraints factors of, lack of time, lack of interest, lack of money, lack of transportation, lack of facilities, lack of a partner, unawareness, lack of skill/abilities and health/fitness problems. Also, respondents were asked to evaluate the importance of each of thirty eight items as prohibiting or limiting factors in their participation in recreational sporting activities (participants), or as reasons for their non-participation (non-participants). As previously mentioned, responses to this questionnaire were made on a four point Likert-type scale that ranged from very important (4) to not important (1). These items were based on instruments which Henderson, *et al* (1988), Jackson (1993), and Raymore *et al* (1993) used for constraints factors on leisure and recreational sporting activities.

Several investigators have begun to develop comprehensive scales consisting of numerous items rather than just a few. In order to follow this idea, thirty-eight items were selected in order to develop an analytical scale with the purpose of covering the whole range of constraints in recreational sporting activities. The scales utilised were compiled from previous instruments developed by Hultsman (1993), Jackson (1993), Jackson and Henderson (1995), Jackson and Rucks (1993) and Raymore *et al* (1994).

Several researchers, using a diversity of leisure and recreation constraint questions, investigated and developed a scale to be used in the investigation of leisure and recreation constraints. This study was also looking for constraints on recreational sporting activities. Similar studies have been conducted by previous researchers. For example, Henderson *et al* (1988) used fifty-five items relating to constraints on recreational sporting activities confronting women in university. Ten factors were identified by factor analysis all of which were found to be acceptable for internal consistency reliability with alpha coefficient ranged from .66 to .86. The overall internal reliability coefficient was .92 which represented very

good consistency. A careful review of this scale indicated that a number of statements were actually duplicated and perhaps this was the reason for the large number of constraint items for such a questionnaire as this. For instance, statements, like “time a problem” and “not enough time”, “money a problem” and “not enough money”, or “don’t know what’s on” and “lack of knowledge”, which seem similar in meaning, could have been avoided.

Raymore *et al.* 's (1993) study, basing itself on the model of leisure constraints suggested by Crawford *et al* (1993) with intrapersonal, interpersonal, structural constraints used a scale which established twenty-one items in three categories, seven items for each of the three categories, and administered it to a student population. A factor analysis of the data supported the idea of three categories of constraints. This model was developed with the purpose of covering all three categories of constraints and empirically supporting the hierarchical model of leisure constraints. Unlike the majority of previous investigations which related to desired new activities, this study investigated constraints on actual participation in recreational sporting activities in the year prior to the survey.

Hultsman's (1993) scales were to an extent taken from the survey carried out by Jackson and Dunn (1991), which included a list of fourteen reasons for not beginning a new activity and sixteen questions about reasons for not continuing participation. However, according to Jackson and Dunn (1991) because of the rankings attached by participant to different items, it was not possible to discuss the reliability of coefficient related aspects of the questionnaire.

Jackson's (1993) scales were one of the instruments used in developing the measurement of constraints in recreational sporting activities. In this study a total constraints score was calculated for all respondents by summing their scores on all fifteen items. The scale had

Cronbach's alpha coefficients ranging from .60 to .80, which represented a good degree of reliability. The instrument included fifteen items which were factor analysed and classified into six factors. However, the number of constraint items was a limitation of the instrument.

Jackson and Henderson's (1995) instrument was developed for leisure activities for gender, and contained fifteen specific questions which were conceptually classified into six factor-based dimensions. The six scales had eigenvalues greater than 1.0 and the cumulative percentage of variance explained was 70.4%. Also six factors had a cronbach's alpha score ranging from .63 to .79 which represented acceptable internal consistency reliability.

Jackson and Rucks (1993) developed Jackson and Dunn's (1991) investigation which suffered from many limitations, all of them arising from the fact that the data on reasons for ceasing an earlier activity and on constraints to participation in a new one were on the two lists. They incorporated many key ideas into their study, including an account of the population from which the subjects were collected and the need for a similar subject structure and similar investigation instrument.

Raymore *et al* (1994) conducted a study based upon a model of intrapersonal, interpersonal and structural constraints on leisure and included twenty-one items which were categorised into the three sections of the model. For each category seven leisure constraints items were administered. The authors considered the model of three types of the leisure constraints statistically satisfactory, based on the results of a confirmatory factor analysis.

The researcher considered and subjected the scales to a critical analysis based upon the previous studies. The instrument was designed on the basis of developing an analytical scale with the purpose of covering the whole range of constraint factors in recreational sporting

activities, and also developing a cross-national empirical study. More specifically, it examined a new model of intrapersonal, interpersonal and structural constraints, suggested by Crawford et al. (1991), and their relationship with actual participation levels in specific recreational sporting activities in two countries, England and Iran. In order to encourage respondents to add any other constraints which were not included, an open question was included at the end of the instrument, asking for their comments.

5.2.7 Expert Judges for the questionnaire's Review

The questionnaire were reviewed for final test by three experts, two from the Centre of Physical Education and Leisure Studies, University of Manchester, and one from the Faculty of Physical Education and Sports Sciences, University of Esfahan, Iran. The expert judges were asked to comment both on the content of the included statements in relation to their clarity and what they were intended to measure. A few final modifications to the questions were made following their comments and suggestions, and then the questionnaire was considered again by the researcher. The instrument was checked through with a back-translation mechanism by an academic expert in the English and Persian languages in an attempt to make sure that the language was comprehensible and appropriate (**Appendix A**).

5.3 Comparative Study

Bereday (1966) states that comparison has been utilised to throw light on procedure abstracted from time and even apart from conceptions of stages. It goes beyond searching for plans of stages and difficult typologies, being a tool, and not an end in itself. The necessity of systematic comparative investigation for the construction of particular theories or for educational practice at any given time is by no means universally accepted as yet. So

the transferability and use of curriculum terminology in any educational system can be extremely problematic.

According to Pooley (1988), the examination of two or more events with the objective of noting their similarities or differences could be specified as a comparative study . Of major concern in a plan of comparative investigation is a description of the geographical, political, and economic uniqueness of each country.

Denzin (1989) suggested that using a multiple scales instrument in relation to a certain group of people, such as a scaled questionnaire in association with participant observation, would enhance internal coherence and reliability. In relation to this Cook and Reichardt (1979) suggested that: *Using qualitative and quantitative methods in tandem or indeed using any methods together helps to correct for the inevitable biases that are present in each method* (p, 23). Olafson (1990) pointed out that the geographical, political, and economic uniqueness of each country, state or province has a major effect on the devising of comparative research. Based upon the methodology and theory of comparative study, both England and Iran were discussed (see chapter 3 and 4) in terms of their geographical, economic, political and social features, with relevant data provided for the two universities forming the samples focus in this study.

Checklist of the Recreational Sporting Participation

In the first part of the instrument information was collected about figures for recreational sporting participation. In the face of the lack of any former research in Iran in related to participation in recreational sporting activities, the instrument was improved by the researcher. Respondents were asked the extent to which they participated in recreational sporting activities within the past year. Responses were classified as follows:

- “No-Participation” = Non-participants
- “Participation” = Participants

The same classification has been employed by previous investigators (e.g., Howard and Crompton, 1984). However, it must be admitted that these classifications did not give specific information about the frequency of participation in sport.

The "constraints on participation in sporting activities" (CPSA) questionnaire was designed to collect information related to the literature survey. It was checked through the back-translation mechanism. The scoring of the constraints scale was on a 4-point Likert type scale, ranging from 4 (most important) to 1 (least important). Respondents were asked to indicate whether each constraint was "A = Very Important = 4 ", "B = Quite Important = 3", "C = Somewhat Important = 2", "D = Not Important = 1".

Participation in sporting activities was addressed by reference to the desire to participate in sporting activities, and to actual participation in sporting activities during the previous year (i.e., a yes or no response). The respondents were classified into two groups: first (non-participation); second (participation) (**Appendix A**).

Whilst there is a greater availability of sporting activities at the University of Manchester than at the University of Esfahan, the cost of using facilities and their distance from accommodation is similar for the two establishments (see chapter 3 and 4).

5.4 Results of the Pilot Study

The main objectives of the pilot study were to examine the sampling procedures and to develop the scales (see section 5.1). There were two groups ES (English Students) and IS (Iranian Students) samples.

5.4.1 Constraints on Participation in Recreational Sporting Activities Questionnaire (CPRSAQ)

Means, standard deviations, and factor analysis were calculated in the model to evaluate individual item characteristics and sub-scales of the CPRSAQ as a whole. As mentioned previously, in order to develop the CPRSAQ, there was a space for respondents' comments at the end of the list. There were no other activities suggested for the scales. The high ratings given for all these items are probably indicative of the positive attitude to all the current items involved. The respondents noted that the list was comprehensive and there were no problems in completing the questionnaire. Based upon the analysis of data and respondents, a final check of the CPRSAQ was conducted and no items were deleted.

5.4.2 Analysis of Items

In order to evaluate the CPRSAQ, both a description of sub-populations and an analysis of variance (SPSS/PC) were performed. Also a varimax rotation with Kaiser normalisation, as developed by Kinnear and Gray (1994), was utilised in this exploratory factor analysis to indicate how well an individual item on the scale reflects a common domain. All items contained in each domain were evaluated through Cronbach's (1951) alpha measure of reliability for both ES and IS samples separately. Examination of the standard deviations revealed that several had variances of less than one, showing some limitation in response variability. Basically, the lack of variability on the scale was not noted to be a critical measurement problem. However, this was a probable reflection of the nature of reality in

this context. As can be seen in Table 5.1 an analysis of the items of the constraints in terms of mean and standard deviation for the ES sample was carried out. The highest mean score revealed was 2.52 in item number four which was “I do not have enough time because of other social commitments”, and the lowest, 1.27 in item number two which was “I do not have enough time because of my family commitments”. Also, the highest standard deviation revealed was 1.04 in item number fifteen which was “I have no transport from home to sporting activity amenities”, and the lowest, .60 in item number thirty-seven “I am afraid of getting hurt/injured”.

Table 5-1

Means, Standard Deviations for Each Item by (ES) Sample

Item	Mean	Standard Deviation	Item	Mean	Standard Deviation
1	2.40	.91	20	1.91	.97
2	1.27	.60	21	2.00	.96
3	1.51	.68	22	1.93	1.03
4	2.52	.92	23	1.63	.94
5	1.75	.87	24	1.32	.68
6	1.82	1.03	25	1.44	.82
7	1.57	.91	26	1.63	.86
8	1.72	.89	27	1.59	.85
9	1.64	.90	28	1.86	.99
10	2.23	1.01	29	1.63	.89
11	1.91	.95	30	2.00	1.03
12	2.32	1.00	31	1.72	.96
13	2.19	.95	32	1.74	.96
14	1.47	.79	33	1.93	.99
15	1.79	1.04	34	1.45	.86
16	1.90	.95	35	1.67	.90
17	1.74	.88	36	1.62	.83
18	2.27	.97	37	1.28	.60
19	1.79	.83	38	1.73	.99

Analysis of the items of constraint for IS samples were conducted in exactly the same way as for ES samples. The highest mean score revealed was 2.84 in item number one, which

was “I do not have enough time because of my work/studies”, and the highest standard deviation was 1.48 in item number nine, which was “I do not like the activities that are available“. The lowest item both in mean score (1.18) and standard deviation (.49) was revealed to be number three which, was “I do not have enough time because of domestic commitments“ (see Table 5.2).

Table 5-2

Means, Standard Deviations for Each Item by (IS) Sample

Item	Mean	Standard Deviation	Item	Mean	Standard Deviation
1	2.84	.98	20	2.38	1.23
2	1.55	.87	21	2.13	1.14
3	1.18	.49	22	1.90	1.06
4	1.66	.84	23	2.21	1.23
5	2.42	1.19	24	2.30	1.16
6	1.54	.93	25	1.85	1.02
7	1.65	.98	26	2.09	1.08
8	2.00	1.09	27	2.02	1.12
9	1.81	1.48	28	2.35	1.16
10	2.27	1.21	29	2.52	1.12
11	2.29	1.18	30	2.18	1.18
12	2.81	1.15	31	1.91	1.10
13	2.69	1.01	32	1.70	.95
14	2.86	1.13	33	1.94	1.08
15	2.50	1.23	34	1.45	.90
16	2.49	1.14	35	1.70	.97
17	3.06	1.01	36	1.72	.98
18	2.74	1.09	37	1.61	.95
19	2.42	1.09	38	2.36	1.40

**** Significant at the .01 level**

5.4.3 Factor Analysis of Principal Component

For both ES and IS samples, a principal component factor analysis was performed (SPSSx Factor programme) to determine whether an underlying design of relationships existed that could be extracted from thirty-eight constraints in the CPRSAQ and which items form coherent subsets that are roughly independent of another one, as proposed by Tabachnick and Fidell (1996). The establishment of the principal items by this method presumes that the test utilised to appraise the variable is perfectly reliable and without error, as stipulated by Bryman and Cramer (1994). Based on the recommendations of Child (1970) and Kinnear and Gray (1994), those factors with eigenvalues greater than 1.0 were extracted and rotated to the Varimax solution.

The data were analyzed in two steps. First, a factor analysis was utilised to identify the underlying constraints dimensions and second, the number of variables loaded on each factor was determined. A minimum value of about .30 to .35 is required to consider that an item loads on a particular factor (Spector, 1992, Devellis, 1991). According to this norm, all items were satisfactory and there were no further modifications made to the CPRSAQ (see **Appendix C**). When the thirty-eight items concerning constraints were factor analysed, nine factors were isolated as representative of the constraints.

The nine factors, all of which related to constraints on recreational sporting activities have been identified as follows:

1. Factor 1 contained five items, related to *lack of time* constraints.
2. Factor 2 contained four items, defined as constraints related to *lack of interest*.
3. Factor 3 contained four items related to *money* problems.
4. Factor 4 contained three items defined as *transportation problems*.

5. Factor 5 contained three items, related to *lack of facilities*.
6. Factor 6 contained five items defined as constraints related to *social (partner)* problems.
7. Factor 7 contained three items related to *unawareness of the opportunities* to participate.
8. Factor 8 contained five items and related to skill/abilities problems.
9. Factor 9 contained six items, related to problems of health and fitness to participate

The nine factors and the loading matrix for ES samples are shown in Table 5.3

All correlation of items for ES samples were in the range .44 to .91 and therefore were deemed satisfactory, because as mentioned previously, a minimum acceptable value was about .30 to .35, as laid down by Spector (1992).

In Table 5.4 are shown all principal component constraints factors on participation in recreational sporting activities for IS samples which, all being in the range .43 to .87, are also acceptable and satisfactory for the present study.

Table 5-3

**English Students (ES) Principal Component Analysis of Constraints on Participation
in Sporting Activities**

Items	Time	Interest	Finance	Transport	Facility	Social	Aware	Skill Ability	Health/Fitness
Time: work/studies	.64								
Time: family commitments	.59								
Time: domestic commitments	.65								
Time: social commitments	.49								
Time: because of timetable	.65								
Not interested		.80							
Not enjoyed in the past		.75							
Not interrupt routine		.66							
Not interest available activity		.66							
Cannot afford			.80						
Cost of transportation			.79						
Cost of equipment			.81						
Admission fee			.78						
No opportunity near my home				.72					
No car				.83					
Transportation takes much time				.82					
Facilities inadequate					.83				
Facilities crowded					.79				
Facilities poorly kept					.78				
Nobody to participate with						.80			
Friends do not have time						.78			
Friends do not like participating						.85			
Social unease						.68			
Social situation (opportunity) limit						.52			
Not known where to participate							.87		
Not known what is available							.91		
Not known where I can learn it							.88		
Not skilled enough								.86	
No one to teach me								.69	
Do not feel confident								.86	
Generally poor ability								.82	
Shy because of lack of ability								.86	
Not fit									.72
Health problems									.64
It makes me feel tired									.77
Too tired for recreation									.66
Afraid of getting hurt									.46
Not concerned about health									.44
Eigenvalue	9.21	4.30	2.38	1.77	1.64	1.54	1.33	1.30	1.17
% of Variance explained	24.2	11.3	6.3	4.7	4.3	4.1	3.5	3.4	3.1
Cumulative % of Variance explained	24.2	35.6	41.9	46.5	50.8	54.9	58.4	61.9	65

Table 5-4

**Iranian Students (IS) Principal Component Analysis of Constraints on Participation
in Sporting Activities**

Items	Time	Interest	Finance	Transport	Facility	Social	Aware	Skill Abil	Health Fitn
Time: work/studies	.50								
Time: family commitments	.53								
Time: domestic commitments	.55								
Time: social commitments	.58								
Time: because of timetable	.48								
Not interested		.59							
Not enjoyed in the past		.73							
Not interrupt routine		.64							
Not interest available activity		.68							
Cannot afford			.87						
Cost transportation			.82						
Cost equipment			.83						
Admission fee			.82						
No opportunity near my home				.76					
No car				.85					
Transportation takes much time				.81					
Facilities inadequate					.77				
Facilities crowded					.79				
Facilities poorly kept					.70				
Nobody to participate with						.77			
Friends do not have time						.72			
Friends do not like participating						.68			
Social unease						.51			
Social situation (opportunity) limit						.53			
Not known where to participate							.80		
Not known what is available							.79		
Not known where I can learn it							.84		
Not skilled enough								.80	
No one to teach me								.71	
Do not feel confident								.74	
Poor ability								.77	
Shy because of lack of ability								.74	
Not fit									.63
Health problems									.64
It makes me feel tired									.75
Too tired for recreation									.72
Afraid of getting hurt									.64
Not concerned about health									.43
Eigenvalue	8.28	2.97	2.66	2.13	1.90	1.77	1.64	1.49	1.21
% of Variance explained	21.8	7.8	7.0	5.6	5.0	4.7	4.3	3.9	3.2
Cumulative % of Variance explained	21.8	29.6	36.7	42.3	47.3	51.9	56.3	60.2	63.4

5.4.4 Analysis of Sub-scales

The vast majority of studies of leisure constraints have been carried out in North America and Canada, with only a limited number in England and none in Iran. Because of the different instruments utilised in studies, comparisons between the constraints factors identified by the present investigation and those examined by investigations in the U.S.A and Canada are difficult. Factors such as accessibility/finance, time and availability of facilities were found by the majority of investigations, which were carried out in the U.S.A and Canada and which employed a factor analytical design (e.g., Jackson, 1993; Jackson & Henderson, 1995). Despite differences in culture, religion, economy, and so on, the present study found lack of money, facilities, time and transportation problems to be the most important constraints on participation in recreational sporting activities and also supported those factors which were identified by the previous studies.

A number of researchers have reported their results on an item-by-item basis, whilst others have utilised either conceptual or empirical methods of classification which have been defined. As pointed out by Jackson (1993) these dimensions are usually more reliable than single items. The current investigation has adopted empirical methods of classification.

Although a Cronbach's alpha coefficient above .70 is generally considered as highly satisfactory, a coefficient above .50 was regarded as fairly satisfactory in this exploratory study.

The reliability scores in some of the scales represented only a moderate reliability level which will always be suspect until further tests are carried out. Viewed more positively, with most of the results of the main study for which this is a pilot having to rely on statistical analysis and validity, the item structure has provided the researcher with some

degree of confidence as to its use. As a research student, the researcher was aware of these consequences.

The factor analysis results are displayed for the whole scale and each sub-scale, and also the internal reliability of each scale is evaluated. The Cronbach's alpha coefficients ranged from .58 to .88 for ES samples and the internal consistency reliability of the whole scale was .91. The highest sub-scale alpha value dimension was skill/ ability (.88), and the time sub-scale had the lowest alpha value (.58) (see Table 5.5).

Table 5-5

Reliability Analysis (ES)

SUB-SCALES	Cronbach's alpha (ES)	Number of Items
Lack of Time	0.58	Five
Lack of Interest	0.69	Four
Lack of Money	0.81	Four
Transportation	0.72	Three
Lack of Facilities	0.73	Three
Social(lack of partner)	0.78	Five
Unawareness	0.87	Three
Lack of Skill/Ability	0.88	Five
Health/Fitness	0.69	Six
Whole Scale	0.91	Thirty Eight

For the IS sample, the Cronbach's alpha coefficients ranged from .45 to .87 and the internal consistency reliability of the whole scale was .89. The money dimension was identified as the highest value of alpha (.87), and the lowest alpha value sub-scale was time (.45) (see Table 5.6).

Table 5-6
Reliability Analysis (IS)

SUB-SCALES	Cronbach's alpha (IS)	Number of Items
Lack of Time	0.45	Five
Lack of Interest	0.61	Four
Lack of Money	0.87	Four
Transportation	0.75	Three
Lack of Facilities	0.65	Three
Social(lack of partner)	0.65	Five
Unawareness	0.75	Three
Lack of Skill/Ability	0.82	Five
Health/Fitness	0.72	Six
Whole Scale	0.89	Thirty Eight

5.4.5 Perception of Constraint Factors in ES samples

In terms of mean score in the ES samples, it was revealed that the factor of *lack of money* was the strongest constraint to participation in sporting activities (mean = 2.16) and *lack of facilities* related problems were perceived as the second most important constraint to participation in sporting activities (mean = 1.93). This was followed by *lack of time* (mean = 1.89), *skill/ abilities* problems (mean = 1.79), *social factors(lack of partner)* - (mean = 1.76), *transportation* (mean = 1.71), *lack of interest* (mean = 1.69), *health/fitness* (mean = 1.61), and *unawareness* loaded as the lowest (mean = 1.55). All the factors were perceived as placing constraints on participation in recreational sporting activities. (see Table 5.7).

Table 5-7

The Perception of Constraint Factors (Total samples of ES)

Constraint Factors	Mean Scores(ES)	Rank
Lack of Money	2.16	1
Lack of Facilities	1.93	2
Lack of Time	1.89	3
Skill/Abilities	1.79	4
Social(lack of partner)	1.76	5
Transportation	1.71	6
Lack of Interest	1.69	7
Health/Fitness	1.61	8
Unawareness	1.55	9

In the IS samples, the factor of *lack of facilities* was the most important constraint on participation in sporting activities in terms of mean score (mean = 2.74); this supports previous studies. The second strongest constraint was perceived as *transportation problems* (mean = 2.62), followed by *lack of money* (mean = 2.52), *social factors(lack of partner)* (mean = 2.16), *skill/abilities* (mean = 2.14), *unawareness* (mean = 1.98), *lack of time* (mean = 1.90), *health/fitness* (mean = 1.79); *lack of interest* (mean = 1.73) was perceived as the lowest of factor constraints on participation in sporting activities. Iranian scores were higher in every factor (see Table 5.8).

Table 5-8**The Perception of Constraint Factors (Total samples of IS)**

Constraint Factors	Mean Scores(ES)	Rank
Lack of Money	2.52	3
Lack of Facilities	2.74	1
Lack of Time	1.90	7
Skill/Abilities	2.14	5
Social(lack of partner)	2.16	4
Transportation	2.62	2
Lack of Interest	1.73	9
Health/Fitness	1.79	8
Unawareness	1.98	6

5.4.6 Significant Differences Between Participants and Non-Participants for Both ES and IS samples

For table 5.9 the mean scores of the two ES sample groups (participants and non-participants) in the constraint factors were calculated and the significance of the differences found evaluated, using an independent sample t-test (SPSSx). The mean scores and the standard deviation of the two groups in each of the constraint factors, the t values for the t-tests and the significance level are indicated. For the whole scale, the results showed that there was no significant difference between the scores of the participants (mean = 1.77) and these of the non-participants (mean = 1.82). In terms of sub-scales, statistically significant differences were found in two factors namely, *lack of money* ($t = -2.44$, $df=149$, $p<.05$) and *transportation* ($t = -2.05$, $df=149$, $p<.05$), with non-participants scoring higher in both dimension

Table 5-9**T-test of Constraint Factors (Mean Scores) by ES Samples**

Factors	Participants n=111		Non-Participants n=40		t	p
	Mean	S.D	Mean	S.D		
Lack of Time	1.81	.46	1.99	.55	-1.63	n.s.
Lack of Interest	1.75	.71	1.53	.57	1.75	n.s.
Lack of Money	2.06	.79	2.41	.73	-2.44	.016
Transportation	1.62	.68	1.90	.83	2.05	.042
Lack of Facilities	1.88	.71	2.07	.79	-1.42	n.s.
Social (lack of partner)	1.72	.65	1.87	.78	1.15	n.s.
Unawareness	1.51	.74	1.60	.72	-.72	n.s.
Lack of Skill/Ability	1.85	.85	1.62	.66	1.55	n.s.
Health/Fitness	1.63	.55	1.53	.50	.93	n.s.
Total Constraints Scale	1.77	.44	1.82	.41	-.65	n.s.

Table 5.10 indicates the mean scores and the standard deviation of the two IS sample groups (participants and non-participants) in each of the constraint factors, together with the t values for the t-tests, and the significance level. The mean scores of two groups were calculated, and the significance of the differences found was evaluated using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were no significant differences between the participants (mean = 2.08) and the non-

participants (mean = 2.12). In terms of the sub-scales, statistically again there were no significant differences found between participants and non-participants groups.

Table 5-10

T-test of Constraint Factors (Mean Scores) by IS Samples

	Participants n=53		Non-Participants n=94		t	p
	Mean	S.D	Mean	S.D		
Lack of Time	1.79	.57	1.94	.41	-1.70	n.s.
Lack of Interest	1.78	.67	1.67	.69	.94	n.s.
Lack of Money	2.38	1.05	2.53	.96	-.88	n.s.
Transportation	2.55	1.00	2.64	.95	-.53	n.s.
Lack of Facilities	2.69	.81	2.72	.87	-.24	n.s.
Social (lack of partner)	2.11	.79	2.19	.71	-.60	n.s.
Unawareness	2.06	1.02	1.92	.81	.90	n.s.
Lack of Skill/Ability	1.99	.88	2.17	.83	-1.25	n.s.
Health/Fitness	1.80	.64	1.74	.64	.64	n.s.
Total Constraints Scale	2.08	.51	2.12	.41	-.60	n.s.

2 -Way ANOVA for the Both Participants and Non-participants And ES and IS samples

The mean scores of the two IS and ES sample groups (participants and non-participants), in the nine constraint factors were calculated, and the significance of the differences found was

evaluated using a 2-way ANOVA test (SPSSx). In sub-scales, the results, shown in table 5.11, indicated that was a difference in degree of constraints between participants and non-participants in the factors of “lack of time” ($p<.05$), and “lack of money” ($p<.05$). In terms of the sub-scales, statistically significant differences between IS and ES samples were found in “lack of money” ($p<.05$), “transportation” ($p<.01$), “lack of facilities” ($p<.01$), “social factors(lack of partner)” ($p<.01$), “unawareness” ($p<.01$), “lack of skill/ability” ($p<.01$), and “health/fitness” ($p<.05$).

Table 5-11

Two-Way ANOVA of Constraint factors (Mean Scores) participants and non-participants for IS & ES samples

Factors	IRAN		ENGLAND		Main Effects Significance	
	P n=53	NP n=94	P n=111	NP n=40	IS & ES	P & NP
Lack of Time	1.79	1.94	1.85	2.00	n.s.	.014
Lack of Interest	1.78	1.67	1.76	1.54	n.s.	n.s.
Lack of Money	2.39	2.54	2.07	2.42	.039	.031
Transportation	2.55	2.64	1.62	1.90	.000	n.s.
Lack of Facilities	2.69	2.73	1.88	2.08	.000	n.s.
Social (lack of partner)	2.11	2.19	1.72	1.87	.000	n.s.
Unawareness	2.06	1.93	1.51	1.61	.000	n.s.
Lack of Skill/Ability	2.00	2.18	1.86	1.63	.002	n.s.
Health/fitness	1.81	1.74	1.63	1.54	.011	n.s.

5.4.7 Validity of the CPRSAQ

Validity of Satisfaction- the majority of the items were ranged to cover the accepted meaning of the concept (Schuyler and Commier, 1996). The researcher probed for an accurate examination of the scale. The scale was judged by three experts, as were item-total correlations, and all were noted to be acceptable.

Validity of the Reputation The scale was probed by respondents' comments which confirmed that it was comprehensive. Also the Iranian expert examined it carefully, and the item-total correlations were shown to be satisfactory.

The Validity of Items was judged by utilising the item-total correlations indication of both the total scale and the sub-scales. Also, no items were rotated in the final structure of the scale which had under .35 in item-total coefficients. This has already been discussed.

The Validity of Factors in the principal component analysis was discussed in section 5.4.3, and, as a result of that, it was established for the study by the researcher. According to Sirkin (1995) construct validity is the capability of the scale to measure variables which are theoretically related to the variable that the scale intends to measure.

5.5 Summary of Pilot Study

The main objectives of the pilot study were to examine a diversity of aspects related to the survey design and the research instrument.

- a) **The construction and the design of the instrument:** As noted previously, no important comments were made about the scale by respondents, and the whole of the

scale was accepted and confirmed by them as comprehensive. The internal arrangement the of instrument was shown to be satisfactory.

- b) Sampling Method:** The data were collected in two universities during a term period. The universities were from two different countries (England and Iran) with different social structures, cultures, economies, religions, languages, and so on. On the other hand, the samples have some similarities such as age (from 18 to 24), education (students), gender (males and females), and being from the student population in both Manchester and Esfahan universities which are more and less the same, with approximately 15,000 students studying different subjects.

With regard to the limited time period for collecting data, as previously stated, in terms of the number of questionnaire collected during the time, the self-administered investigation operated very well and was satisfactory. This instrument measured perceptions, which as Ford (1987) points out, are not fundamentally precise representations of reality. The above subjects were questioned in relation to three categories of constraints, namely, intrapersonal, interpersonal, and structural constraints. The operation of each of the items of the scale and sub-scales of constraints on leisure was considered satisfactory as well.

- C) Evaluation of the Scale:** As stated previously, explicit statistical procedures were employed to indicate that the instrument is reliable and valid for the study. Also, the pilot study was carried out for other reasons, such as to analyse components of the questionnaire that might require modification for the main study, to confirm that people do, indeed, attempt to overcome constraints, to determine the tactics which might be used to remove or reduce particular constraints, and to provide preliminary data that could be utilised to generate pre-coded checklists of activities and constraints discovered. In terms of the sporting activities questionnaire, no more activities were added by either ES or IS samples in the space allowed at the end of the questionnaire.

D) Comparison of the ES and IS samples: As pointed out by Beckers (1995)

“International communication is not a new phenomenon in this era of globalisation and in the past, leisure studies was conducted based on both universal concepts and national differences such as social, economic and cultural change. Leisure is main source for scientific findings and leisure studies belong to the oldest field of social science investigation. A method of scientific management of leisure and rational recreation sporting activities is required to establish a scientific information. The nature of leisure itself has constructed the necessity for scientific investigation on both sides of the Atlantic”.

The most constantly applied technique may be the varimax rotation developed by Kaiser (1956). As Ichimura (1991) points out, factor analysis still has much to offer the sports science and physical education profession. Further Standeven (1991) states that, since its commencement in 1978, the International Society for Comparative Physical Education and Sport (ISCPES) has shown its concern for demanding self-awareness in approaches to the construction of comparative sports knowledge.

Investigators utilised different criteria to illustrate the constancy of leisure constructs. There are three ways suggested by Crawford *et al.* (1986) in which constancy may be considered: factor constancy, pattern (or rank-order) constancy and mean (or magnitude) constancy. The majority of investigations have utilised factor analysis for inter-group constancy of leisure constructs, usually within a cross-sectional study design. A detailed statistical analysis of the data has been presented and discussed previously.

In brief, the aim of the present study was to conduct a comparative study of leisure constraints using a model identifying intra-personal, interpersonal, and structural constraints. This comparative investigation examined leisure constraints in two countries (England and Iran) with different societies, languages, economies and religions in order to

reveal a number of similarities and differences. The most fundamental similarity was in the factor structure of the constraints scale. It has been shown that the factor structure for each country is identical, with similar individual items loading on each factor and the same order of importance in relation to the percentage of variance (see tables 5.3 and 5.4). Although it is sometimes difficult to compare directly results from one investigation to another because of differences in methodology, the factors categorised in the results of the investigation have been found in other studies in North America, for instance, by Jackson (1993), and also by Alexandris and Carroll (1997a) in an investigation in Greece. This would suggest that there is a possibility of universal applicability, crossing cultural divisions.

CHAPTER SIX

MAIN STUDY

6. Method

The methodological procedures related to the scales development were presented in section 5.2. In this section, issues associated with the data collection and sampling procedures of the main study will be presented. The objectives of the main study have also been presented in section 1.3.

6.1 *Data Collection*

A self-administered questionnaire (see **Appendix B**) was used to collect data from two distinct samples. Sample ES (English students) and IS (Iranian students) consisted of random samples at Manchester (England) and Esfahan (Iran) Universities, both of which are amongst the biggest universities (see Tables 3.1 and 4.1) in their respective countries. The distribution of the questionnaires took place on weekdays, during the daytime in the faculties and departments of the universities. Questionnaires were distributed by the secretaries of each department and also by the researcher (personally) in the Students' Union of both universities and it was requested that they be returned to the researcher in a prepared box. Data were collected during the second academic term of 1995-1996 in both England and Iran. The ES sample consisted of five hundred and two (502) respondents and

the IS sample of five hundred and ninety-eight (598) respondents, all of whose questionnaires were fully completed and consequently usable.

6.1.1 Sample Demographic

Both the samples are of students and contained both males and females which means they are educated people, and the ages ranged from 18 to 25 years so that they are therefore included in the young adulthood category (see Table 6.1). The university's students are likely to be representative of a diversity of ethnicity, socio-economic environment, and geographic representation (e.g., rural, suburban, urban) and of different backgrounds such as socio-economic groups, social regions, religions, social cultural factors, and so on. However, it was not possible to collect data from a fully representative sample based on these diverse variables.

The researcher checked the marital status of respondents and all were single.

Table 6-1

Sample Demographic

Gender Groups	ES (sample)		IS (sample)	
	no	%	no	%
Male	252	50.2	281	47
Female	250	49.8	317	53
Total	502	100	598	100

6.1.2 Sample Size

According to Jackson (1987) the sample size might result in bias whose effect across the entire range of variables on which such a study as this is based would be extremely difficult to detect, leading to invalid findings. In terms of influence and the degree to which the results can be generalised to the whole study population, the sample size of a study is an important issue. Veal (1992) discussed sampling choices, stating that it is the absolute size of the sample which is important, not its size relative to the population. The size of the sampling error, hence, relies on the size of the sample and is unrelated to the size of the population (Table 6.2).

Table 6-2

Confidence Intervals and Sample Sizes

Sample size	Percentages found from samples				
	50%	49% / 60%	30% / 70%	20% / 80%	10% / 90%
	Confidence Intervals + - %				
30	19.6	*	*	*	*
50	14.9	14.6	*	*	*
80	11.6	11.4	10.7	*	*
100	10.3	10.1	9.5	8.0	6.0
200	7.2	6.9	6.6	5.8	4.0
400	5.0	4.9	4.6	4.0	3.0
500	4.5	4.4	4.1	3.6	2.6
800	3.6	3.6	3.3	2.9	2.2
1000	3.2	3.1	2.9	2.5	1.9
2000	2.2	2.2	2.9	1.8	1.3

Source: "Research Methods for Leisure and Tourism". Veal (1992)

As can be seen in Table 6.2 the sampling error relies both on the sampling size, and on the finding or the statistic detected. Consequently, as the sample size increase the sampling error decreases. For instance, for the size of 500 the sampling error for a finding of 50% is 4.5, for a finding of 20% / 80% it is 3.6 and can compare with the other sample sizes. In

view of the limitations on time and money, the researcher decided that, for the design of the investigation, a sample size of five hundred individuals in each country was a satisfactory one.

As pointed out, both the ES sample (502 individuals) and the IS sample (598 individuals) were judged to be satisfactory for the purposes of the present study. It is important to use a measure of association that controls for sample size, because, according to Hultsman (1993), sample size can regularly yield significant differences between items entirely on its own.

6.2 Results of the Main Study

At the data collection stage of the main study (second term 1995-96), both ES and IS samples were tested separately for each group (e.g., gender, participants and non-participants) involved in this study. Therefore a separate analysis could be employed to examine purely the undergraduate age group.

6.2.1 Constraints on Sporting Activities Participation

The results of the main study with respect to constraints on participation in sporting activities will be presented as follows:

- Item analysis of the constraints scale.
- Principal component analysis of the constraints scale.
- Relative importance of constraints dimensions.
- Demographic differences in the perception of constraints dimensions.

- Frequency of sport participation and non-participation.
- The relationship between perception of the dimensions of constraints and participation /non-participation in sport.
- The relationship between the perception of constraints and the frequency of participation in sport

6.2.2 Item Analysis of the Constraints Scale

The same operations were employed as in the pilot study. Two types of item analysis methods were used in order to assess aspects related to the psychometric properties of the scale: correlation analysis and analysis based on the criterion of internal consistency.

Correlation analysis: The item-scale correlations were computed for both ES and IS samples. The result indicated that all the items correlated satisfactorily ($>.35$) with the sum score, and hence no modification was required. All the item-total correlations together with the standard deviations and mean scores of items are shown in **Appendix D**.

Internal Consistency Reliability of the Scale: The correlations coefficient alpha were calculated for both ES and IS and also for males and females in each group. The value of alpha, irrespective of sex for overall ES (.90) and IS (.87) samples, for male ES (.91) and IS (.86) samples and for female ES (.89) and IS (.88) samples, once again, indicated that the scale was satisfactorily reliable.

6.2.3 Principal Component Analysis of the Constraints Scale

As Oppenheim (1992) stated, factor analysis is a complex, analytic, statistical procedure for determining the general underlying dimensions of factors that exist within a set of concrete

observations, variables, attributes or responses. Tabachnick and Fidell (1996) stated that a common objective is to represent a set of variables in terms of a smaller number of hypothetical variables or factors. A factor is a hypothesised, measured, and underlying variable that is presumed to be the source of the observed variables. The analysis was used to correlate variable composites or factors from the original variables that the factors represent. Comrey and Lee (1992) established that the appropriateness of the analysis depends upon whether the variables were related to each other, as indicated by the correlation matrix. Communality was used as the criterion to indicate the amount of variance shared by one variable with all the other variables included in the analysis. The greater the value of the communality, the more appropriate the model.

An exploratory and principal component factor analysis was performed for all the 38 items and only those components with an eigenvalue greater than 1.0 were accepted. An eigenvalue represents variance. Because the variance that each standardised variable contributes to a principal components extraction is 1.0, a component with an eigenvalue less than 1.0 is not as important, from a variance perspective, as an observed variable (Tabachnick and Fidell, 1996, p. 672). As this exploratory analysis is performed to provide a tool for considering variables and generating hypotheses about the underlying process, only those items with loadings of .32 and above were accepted (Tabachnick and Fidell, 1996, p. 677). Comrey and Lee (1992) suggested that loadings in excess of .71 (50 per cent overlapping variance) are considered excellent, .63 (40 per cent overlapping variance) very good, .55 (30 per cent overlapping variance) good, .45 (20 per cent overlapping variance) fair, and .32 (10 per cent overlapping variance) poor and the least accepted. A principal component analysis with varimax rotation, was completed to identify the basic dimensions of the concept, and to compare these dimensions with those identified in the pilot study. All components in both ES and IS samples (male and female) had an eigenvalue greater than

1.0, and were rotated with both orthogonal and oblique rotation. Orthogonal rotation was adopted, as recommended by Tabachnick and Fidell (1996), because of conceptual comprehensibility and ease of description.

Some researchers have reported their results on an item-by-item basis, whilst others have used either conceptual or empirical methods of classification which have been defined. As pointed out by Jackson (1993) these dimensions are usually more reliable than single items. This study is presented with empirical methods of classification. All the factor analysis coefficients and the loading matrix are shown in tables 6 (3,4,5) for ES and 6 (6,7,8) for IS samples.

The loading matrix indicated that all the items loaded satisfactorily on the factors in both ES and IS samples as follows:

- Factor 1: contained five items related to “lack of time”.
- Factor 2: contained four items, related to “lack of interest”.
- Factor 3: contained four items, related to “lack of money”.
- Factor 4: contained three items, related to “transportation problems”.
- Factor 5: contained three items, related to “lack of facilities”.
- Factor 6: contained five items, concerning “social (partner) related problems”.
- Factor 7: contained three items, related to “unawareness of the opportunities to participate”.
- Factor 8: contained five items related to “lack of skill/abilities”.
- Factor 9: contained six items, concerning “health/fitness problems”.

The data for this analysis were the 38 items, from which were derived the nine factors to be measured, which had been established following the pilot study. The analysis acts as a

validation process for the clustering of the attributes into the nine sub-scales of constraint factors. Through the principal component method of factor analysis, orthogonal factors were derived, and through varimax rotation, these factors were simplified and rendered interpretable for further analysis. An oblique rotation with Kaiser normalisation was also applied to the initial solution to examine the relationship between the factors. The criterion for accepting factors for each rotation was to extract only those factors whose eigenvalues exceeded one (1.0) and had an item-loading of at least 0.45 (20 per cent overlapping) which is considered fair and acceptable (Comrey and Lee, 1992). These criteria and the percentage of variance provided the information necessary for deciding which factors to retain. Using those criteria, and by varimax rotation, nine factors were extracted and found to be logical and consistent with the results in the pilot study.

A number of items loaded on more than one factor were included under the factor with the highest loadings. These are shown for the ES male and female combined samples, in table 6.3; the ES male sample in table 6.4; and the ES female sample in table 6.5. The IS male and female combined sample in table 6.6; the IS male sample in table 6.7; and for IS female sample in table 6.8 are shown. Items were included in the factor where they fitted better conceptually and had the higher correlations. Thus, the factor structure pointed to a nine-factor solution with 38 items. The tables illustrate how the loading was spread out over all factors.

Table 6-3

Male & Female English Students (ES) Factor Analysis of Constraints on Participation in Sporting Activities									
	Time	Interest	Financial	Transport	Facility	Social	Aware	Skill	Health
Time: work/studies	.71								
Time: family commitments	.58								
Time: domestic commitments	.63								
Time: social commitments	.51								
Time: because of timetable	.55								
Not interested		.78							
Not enjoyed in the past		.77						.41	
Not interrupt routine		.59							
Not interest available activity		.67							
Cannot afford			.84						
Cost transportation			.82	.49					
Cost equipment			.84	.43					
Admission fee			.82						
No opportunity near my home				.74					
No car			.41	.85					
Transportation takes much time				.82					
Facilities inadequate				.41	.84				
Facilities crowded					.82				
Facilities poorly kept					.86				
Nobody to participate with						.81			
Friends do not have time						.82			
Friends do not like participating						.76			
Social unease						.65		.57	
Social situation(opportunity)limit						.56	.43		
Not known where to participate				.40		.44	.83		
Not known what is available							.92		
Not known where I can learn it						.42	.87	.45	
Not skilled enough						.40		.84	
No one to teach me						.47	.48	.72	
Do not feel confident						.44		.86	
Generally poor ability		.44						.81	
Shy because of lack of ability						.42		.85	.41
Not fit								.52	.70
Health problems									.62
It makes me feel tired									.75
Too tired for recreation									.70
Afraid of getting hurt									.48
Not concerned about health									.49
Eigenvalue	8.91	3.24	2.07	1.92	1.75	1.54	1.43	1.36	1.13
% of Variance explained	23.5	8.5	5.5	5.1	4.6	4.1	3.8	3.6	3.0
Cumulative % of Variance explained	23.5	32.0	37.5	42.5	47.1	51.2	55.0	58.6	61.6

Table 6-4.

Male English Students (ES) Factor Analysis of Constraints on Participation in Sporting Activities									
	Time	Interest	Finance	Transportation	Facility	Social	Awareness	Skill Ability	Health/Fitness
Time: work/studies	.71								
Time: family commitments	.56								
Time: domestic commitments	.65								
Time: social commitments	.52								
Time: because of timetable	.56								
Not interested		.80							
Not enjoyed in the past		.78						.44	
Not interrupt routine		.62							
Not interest available activity	.42	.70							
Cannot afford			.85						
Cost transportation			.84	.45					
Cost equipment			.86	.45					
Admission fee			.82						
No opportunity near my home				.78		.40			
No car			.41	.84					
Transportation takes much time			.40	.80					
Facilities inadequate					.82				
Facilities crowded					.82				
Facilities poorly kept					.88				
Nobody to participate with						.79			
Friends do not have time						.78			
Friends do not like participating						.75			
Social unease						.67		.53	
Social situation(opportunity) limit				.45		.66	.45		
Not known where to participate				.42		.48	.84		
Not known what is available							.92		
Not known where I can learn it						.45	.85	.46	
Not skilled enough								.84	
No one to teach me						.47	.48	.74	
Do not feel confident						.50		.86	.40
Generally poor ability		.48						.81	.42
Shy because of lack of ability						.45		.84	.42
Not fit								.47	.70
Health problems									.66
It makes me feel tired									.76
Too tired for recreation									.70
Afraid of getting hurt									.45
Not concerned about health									.51
Eigenvalue	9.41	3.49	2.18	1.78	1.70	1.53	1.46	1.41	1.23
% of Variance explained	24.8	9.2	5.7	4.7	4.5	4.0	3.9	3.7	3.2
Cumulative % of Variance explained	24.8	34.0	39.7	44.4	48.9	52.9	56.8	60.5	63.7

Table 6-5

Female English Students (ES) Factor Analysis of Constraints on Participation in Sporting Activities									
	Time	Interest	Finance	Transportation	Facility	Social	Awareness	Skill Ability	Health/Fitness
Time: work/studies	.69								
Time: family commitments	.61								
Time: domestic commitments	.63								
Time: social commitments	.48								
Time: because of timetable	.54								
Not interested		.76							
Not enjoyed in the past		.76							
Not interrupt routine		.55							
Not interest available activity		.64							
Cannot afford			.83						
Cost transportation			.81	.53					
Cost equipment			.82	.43					
Admission fee			.81						
No opportunity near my home			.42	.70					
No car			.44	.86	.41				
Transportation takes much time				.84					
Facilities inadequate				.43	.86				
Facilities crowded					.81				
Facilities poorly kept					.85				
Nobody to participate with						.84			
Friends do not have time						.86			
Friends do not like participating						.76			
Social unease						.64		.59	.43
Social situation(opportunity) limit						.46			
Not known where to participate						.41	.82		
Not known what is available						.41	.93		
Not known where I can learn it							.88	.47	
Not skilled enough						.41		.84	
No one to teach me						.47	.49	.73	
Do not feel confident							.40	.86	
Generally poor ability		.40						.80	
Shy because of lack of ability						.40		.86	.44
Not fit								.57	.70
Health problems									.59
It makes me feel tired									.74
Too tired for recreation									.70
Afraid of getting hurt									.52
Not concerned about health									.46
Eigenvalue	8.64	3.22	2.13	2.09	1.82	1.59	1.52	1.28	1.20
% of Variance explained	22.8	8.5	5.6	5.5	4.8	4.2	4.0	3.4	3.2
Cumulative % of Variance explained	22.8	31.2	36.9	42.4	47.2	51.4	55.4	58.8	61.9

Table 6-6

Male & Female Iranian Students (IS) Factor Analysis of Constraints on Participation in Sporting Activities									
	Time	Interest	Finance	Transportation	Facility	Social	Awareness	Skill Ability	Health/Fitness
Time: work/studies	.58								
Time: family commitments	.61								
Time: domestic commitments	.51								
Time: social commitments	.61								
Time: because of timetable	.58								
Not interested		.75							
Not enjoyed in the past		.74							
Not interrupt routine		.63							
Not interest available activity		.66							
Cannot afford			.76						
Cost transportation			.78						
Cost equipment			.80						
Admission fee			.76						
No opportunity near my home				.78					
No car			.40	.84					
Transportation takes much time				.77	.40				
Facilities inadequate				.44	.74				
Facilities crowded					.77				
Facilities poorly kept					.75				
Nobody to participate with						.70			
Friends do not have time						.75			
Friends do not like participating						.70			
Social unease						.54			
Social situation(opportunity) limit						.55			
Not known where to participate							.80		
Not known what is available							.83		
Not known where I can learn it							.82		
Not skilled enough								.78	
No one to teach me							.40	.66	
Do not feel confident								.74	
poor ability								.76	.51
Shy because of lack of ability								.69	
Not fit								.63	.61
Health problems									.52
It makes me feel tired									.72
Too tired for recreation									.70
Afraid of getting hurt									.49
Not concerned about health									.47
Eigenvalue	7.18	3.40	2.03	1.94	1.58	1.57	1.29	1.26	1.18
% of variance explained	18.9	9.0	5.3	5.1	4.2	4.1	3.4	3.3	3.1
Cumulative % of Variance explained	18.9	27.9	33.2	38.3	42.5	46.7	50.1	53.4	56.5

Table 6-7

Male Iranian Students (IS) Factor Analysis of Constraints on Participation in Sporting Activities									
	Time	Interest	Financial	Transportation	Facility	Social	Awareness	Skill Ability	Health/Fitness
Time: work/studies	.62								
Time: family commitments	.69								
Time: domestic commitments	.52								
Time: social commitments	.61								
Time: because of timetable	.47								
Not interested		.71							
Not enjoyed in the past		.75						.41	
Not interrupt routine		.57							
Not interest available activity		.66							
Cannot afford			.73						
Cost transportation			.76	.44					
Cost equipment			.80	.42					
Admission fee			.78						
No opportunity near my home				.77					
No car			.46	.82					
Transportation takes much time				.77					
Facilities inadequate					.70				
Facilities crowded					.78				
Facilities poorly kept					.75				
Nobody to participate with						.72			
Friends do not have time						.71			
Friends do not like participating						.66			
Social unease						.59			
Social situation(opportunity) limit						.52			
Not known where to participate							.77		
Not known what is available							.83		
Not known where I can learn it							.81	.40	
Not skilled enough								.76	
No one to teach me								.68	
Do not feel confident								.75	.42
poor ability								.75	.50
Shy because of lack of ability								.73	
Not fit								.63	.57
Health problems									.63
It makes me feel tired									.67
Too tired for recreation									.63
Afraid of getting hurt									.48
Not concerned about health									.51
Eigenvalue	6.76	3.38	2.19	1.91	1.71	1.54	1.43	1.39	1.29
% of variance explained	17.8	8.9	5.8	5.0	4.5	4.1	3.8	3.7	3.4
Cumulative % of Variance explained	17.8	26.7	32.5	37.5	42.0	46.1	49.9	53.5	56.9

Table 6-8.

Female Iranian Students (IS) Factor Analysis of Constraints on Participation in Sporting Activities									
	Time	Interest	Financial	Transportation	Facility	Social	Awareness	Skill Ability	Health/Fitness
Time: work/studies	.53								
Time: family commitments	.50								
Time: domestic commitments	.51								
Time: social commitments	.59								
Time: because of timetable	.69								
Not interested		.77							
Not enjoyed in the past		.74							
Not interrupt routine		.68							
Not interest available activity		.66							
Cannot afford			.79						
Cost transportation			.80						
Cost equipment			.81	.40					
Admission fee			.75						
No opportunity near my home			.40	.79					
No car				.86	.40				
Transportation takes much time				.76	.43				
Facilities inadequate				.47	.77				
Facilities crowded					.77				
Facilities poorly kept					.75				
Nobody to participate with						.67			
Friends do not have time						.78			
Friends do not like participating						.73			
Social unease						.54			
Social situation(opportunity) limit						.53			
Not known where to participate							.80		
Not known what is available							.83		
Not known where I can learn it							.82		
Not skilled enough								.79	
No one to teach me				.43			.44	.65	
Do not feel confident								.74	
poor ability								.77	
Shy because of lack of ability								.67	.52
								.63	.45
Not fit									.64
Health problems									.46
It makes me feel tired								.42	.74
Too tired for recreation									.74
Afraid of getting hurt									.50
Not concerned about health									.43
Eigenvalue	7.70	3.75	2.01	1.88	1.60	1.51	1.49	1.30	1.20
% of variance explained	20.3	9.9	5.3	5.0	4.2	4.0	3.9	3.4	3.2
Cumulative % of Variance explained	20.3	30.1	35.4	40.4	44.6	48.6	52.5	56.0	59.1

Item Analysis of the Constraints Factors: All the items in both ES and IS samples were satisfactory (>35). All factor analysis results are displayed for the whole scale and each sub-scale, and also the internal reliability of each scale is evaluated. As can be seen in Table 6.9, for males and females in the ES sample, the Cronbach's alpha coefficients ranged from .56 to .88 and the internal consistency reliability of the whole scale was .90. Also, for males and females in the IS sample, the Cronbach's alpha coefficients ranged from .55 to .79 and the internal consistency reliability of whole scale was .87.

Although a Cronbach's alpha coefficient above .70 is generally considered as highly satisfactory a coefficient above .50 was regarded as fairly satisfactory in this exploratory study.

The reliability scores in some of the scales represented only a moderate reliability level which will always be suspect until further tests are carried out. The most appropriate action would be to administer the instrument again, in another study, with only the factor structure and the items that have been established. However, because of time and financial constraints, this intention cannot presently be carried out. Viewed more positively, as this study acts as an exploratory analysis, and most of the results have to rely on statistical analysis and validity, the item structure has provided the researcher with some degree of confidence as to its use. As a research student, the researcher was aware of these consequences.

Table 6-9**Reliability Analysis (Male & Female) Samples**

SUB-SCALES	Cronbach's alpha (ES) (IS)		Number of Items
Lack of Time	.56	.55	Five
Lack of Interest	.67	.66	Four
Lack of Money	.85	.79	Four
Transportation	.73	.72	Three
Lack of Facilities	.80	.64	Three
Social(lack of partner)	.77	.67	Five
Unawareness	.85	.77	Three
Lack of Skill/Ability	.88	.79	Five
Health/Fitness	.69	.64	Six
Whole Scale	.90	.87	Thirty Eight

For males in the ES sample, the Cronbach's alpha coefficients ranged from .57 to .88 and the internal consistency reliability of the whole scale was .91. For, females in the IS sample, the Cronbach's alpha coefficients ranged from .54 to .79 and the internal consistency reliability of the whole scale was .86 (Table 6.10). These were satisfactory.

Table 6-10**Reliability Analysis (Male) Samples**

SUB-SCALES	Cronbach's alpha		Number of Items
	(ES)	(IS)	
Lack of Time	.57	.54	Five
Lack of Interest	.71	.60	Four
Lack of Money	.87	.77	Four
Transportation	.74	.70	Three
Lack of Facilities	.80	.62	Three
Social(lack of partner)	.79	.65	Five
Unawareness	.84	.75	Three
Lack of Skill/Ability	.88	.79	Five
Health/Fitness	.70	.63	Six
Whole Scale	.91	.86	Thirty Eight

For females in the ES sample, the Cronbach's alpha coefficients ranged from .54 to .88 and the internal consistency reliability of the whole scale was .89. For, females in the IS sample, the Cronbach's alpha coefficients ranged from .55 to .80 and internal consistency reliability of the whole scale was .88 (Table 6.11). These were satisfactory.

Table 6-11**Reliability Analysis (Female) Samples**

SUB-SCALES	Cronbach's alpha (ES) (IS)		Number of Items
Lack of Time	.54	.55	Five
Lack of Interest	.62	.69	Four
Lack of Money	.83	.80	Four
Transportation	.72	.73	Three
Lack of Facilities	.80	.65	Three
Social(lack of partner)	.76	.67	Five
Unawareness	.86	.77	Three
Lack of Skill/Ability	.88	.79	Five
Health/Fitness	.68	.64	Six
Whole Scale	.89	.88	Thirty Eight

Conceptual Framework

Factors were classified as intra-personal, interpersonal, and structural constraints as proposed by Crawford, et. al. (1987) (see Table 6.12). All factors were identical to the factors of leisure constraint which have been most commonly identified in previous studies such as Jackson (1993). Factors 2, 8, and 9 (lack of interest, lack of skill/abilities and health/fitness problems) corresponded to "intra-personal" constraints. Factors 1, 3, 4, and 5 (lack of time, lack of money, geographical distance, lack of facilities) were conceptualised as "structural" constraints, whereas factor 6, "social" factors (lack of partner), interacts between preferences and participation and is "interpersonal". Factor 7, "Awareness " (lack of information) as opposed to the objective absence of opportunities for recreational activities, can be recognised as either structural or individual. Crawford and Godbey (1987)

have argued that some of these constraints (e.g., availability, appropriateness) can be considered both as intra-personal and structural constraints. In the present study, items of the "awareness" cluster were considered and related to perceived lack of knowledge, and subsequently unawareness was classified as an "intra-personal" constraint. The classification of the factors is shown in Table 6.12.

Table 6-12

Conceptual Frame work

Intra-personal Constraints	Interpersonal Constraints	Structural Constraints
Factor 2: Lack of Interest	Factor 6: Social (lack of partner)	Factor 1: Lack of Time
Factor 7: Unawareness		Factor 3: Lack of Money
Factor 8: Skill/Abilities		Factor 4: Transportation
Factor 9: Health/Fitness		Factor 5: Facilities

6.3 Relative Importance of Constraints Dimensions

Perception of constraint factors, total ES male and female combined sample and IS male and female combined sample

Table 6.13, which reflects mean scores in the ES sample, reveals that the factor of "lack of money" was the strongest constraint to participation in sporting activities (mean = 2.09) and "lack of facilities"-related problems were perceived as the second most important of such constraints (mean = 1.98). This was followed by "lack of time" (mean = 1.95), "social" factors - lack of partner - (mean = 1.81), "skill/abilities" (mean = 1.80), , "lack of interest" (mean = 1.68), "transportation" (mean = 1.67), "unawareness" (mean = 1.65) with

"health/fitness loaded as the lowest (mean = 1.62). All the factors were perceived as placing constraints on participation in sporting activities.

In the IS samples, the factor of "lack of facilities" was the most important constraint to participation in sporting activities in terms of mean scores (mean = 2.64); this supports previous studies. The second strongest constraint was perceived as "transportation-related problems" (mean = 2.56), followed by "lack of money" (mean = 2.51), "social" factors (lack of partner) (mean = 2.25), "skill/abilities" (mean = 2.06), "unawareness" (mean = 2.00), "lack of interest" (mean = 1.79), "lack of time" (mean = 1.78), with the "health/fitness" (mean = 1.75) was perceived as lowest of factor constraints to participation in sporting activities. Iranian scores were higher in each factor.

Table 6-13

(Male & Female) The Perception of Constraint Factors (Total samples of ES and IS).

Mean Scores (ES) Rank	Constraint Factors	Mean Scores (IS) Rank
2.09 1	Lack of Money	2.51 3
1.98 2	Lack of Facilities	2.64 1
1.95 3	Lack of Time	1.78 8
1.81 4	Social (lack of partner)	2.25 4
1.80 5	Skill/Abilities	2.06 5
1.68 6	Lack of Interest	1.79 7
1.67 7	Transportation	2.56 2
1.65 8	Unawareness	2.00 6
1.62 9	Health/Fitness	1.75 9
1.79	Whole Scale	2.08

Perception of constraint factors, total ES male and IS male samples

Table 6.14, which reflects mean scores in the ES sample, reveals that the factor of "lack of facilities" was the strongest constraint to participation in sporting activities (mean = 2.01) and "lack of money" was perceived as the second most important of such constraints (mean = 2.00). This was followed by "lack of time" (mean = 1.87), "social" factors- lack of partner - (mean = 1.78), "unawareness" (mean = 1.73), "transportation" (mean = 1.72), "skill/abilities" (mean = 1.70), "lack of interest" (mean = 1.66), with "health/fitness loaded as the lowest (mean = 1.63). All the factors were perceived as placing constraints on participation in sporting activities.

In the IS samples, the factor of "lack of facilities" was the most important constraint to participation in sporting activities in terms of mean scores (mean = 2.60). The second strongest constraint was perceived as "lack of money" (mean = 2.54), followed by "transportation-related problems" (mean = 2.45), "social" factors (lack of partner) (mean = 2.08), "skill/abilities" (mean = 2.03), "lack of time" (mean = 1.86), "unawareness" (mean = 1.83), "health/fitness" (mean = 1.69) with "lack of interest" (mean = 1.67) perceived as lowest of factor constraints to participation in sporting activities. Iranian scores were higher in each factor.

Table 6-14**(Male) The Perception of Constraint Factors (Total samples of ES and IS).**

Mean Scores (ES) Rank	Constraint Factors	Mean Scores (IS) Rank
2.01 1	Lack of Facilities	2.60 1
2.00 2	Lack of Money	2.54 2
1.87 3	Lack of Time	1.86 6
1.78 4	Social (lack of partner)	2.08 4
1.73 5	Unawareness	1.83 7
1.72 6	Transportation	2.45 3
1.70 7	Skill/Abilities	2.03 5
1.66 8	Lack of Interest	1.67 9
1.63 9	Health/Fitness	1.69 8
1.76	Whole Scale	2.02

Perception of constraint factors, total ES female and IS female samples

Table 6.15, which reflects mean scores for females in the ES sample, reveals that the factor of "lack of money" was the strongest constraint to participation in sporting activities (mean = 2.17) and "lack of time" was perceived as the second most important of such constraint (mean = 2.03). This was followed by "lack of facilities" (mean = 1.96), "skill/abilities" (mean = 1.90), "social" factors- lack of partner - (mean = 1.83), "lack of interest" (mean = 1.70), "transportation" (mean = 1.63), "health/fitness" (mean = 1.60), with "unawareness" loaded as the lowest (mean = 1.57). All the factors were perceived as placing constraints on participation in sporting activities.

Among the females in the IS samples, the factor of "lack of facilities" was the most important constraint to participation in sporting activities in terms of mean scores (mean = 2.68). The second strongest constraint were perceived as "transportation-related problems" (mean = 2.65), followed by "lack of money" (mean = 2.48), "social" factors (lack of

partner) (mean = 2.40), "unawareness" (mean = 2.16), "skill/abilities" (mean = 2.08), "lack of interest" (mean = 1.89), "health/fitness" (mean = 1.81), with "lack of time" (mean = 1.71) perceived as lowest of the factor constraints to participation in sporting activities. Iranian scores were higher in each factor.

Table 6-15

(Female) The Perception of Constraint Factors (Total samples of ES and IS).

Mean Scores (ES) Rank	Constraint Factors	Mean Scores (IS) Rank
2.17 1	Lack of Money	2.48 3
2.03 2	Lack of Time	1.71 9
1.96 3	Lack of Facilities	2.68 1
1.90 4	Skill/Abilities	2.08 6
1.83 5	Social (lack of partner)	2.40 4
1.70 6	Lack of Interest	1.89 7
1.63 7	Transportation	2.65 2
1.60 8	Health/Fitness	1.81 8
1.57 9	Unawareness	2.16 5
1.82	Whole Scale	2.13

6.4 Summary

The analysis of the results was undertaken to examine whether there were any differences between ES and IS samples in participation in sporting activities the year before the study. All mean scores in IS samples were higher than ES samples.

- The ES male and female combined sample identified the factors of “ Money”, “Facilities”, and “Time” as structural and these were found to be the most important constraints to participation in recreational sporting activities. “Social” constraints (lack of partner) classified as interpersonal constraints were less important and “Interest”,

“Health/Fitness”, and “Awareness” also classified as intra-personal were reported as the weakest constraints to participation in recreational sporting activities .

- The IS male and female combined sample identified the factors of “Facilities”, “Transportation”, and “ Money” as structural and these were found to be the most important constraints to participation in recreational sporting activities. “Social” factors (lack of partner) classified as interpersonal constraints were less important and “Health/Fitness”, “Interest”, and “Awareness” also classified as intra-personal constraints were reported as the weakest constraints to participation in recreational sporting activities.
- the ES male sample identified the factors of “Facilities”, “ Money”, and “Time” as structural and these were found to be the most important constraints to participation in recreational sporting activities. “Social” factors (lack of partner) classified as interpersonal constraints were less important and “Health/Fitness”, “Interest”, and “Skill/Ability” also classified as intra-personal were reported as the weakest constraints to participation in recreational sporting activities.
- The IS male sample identified the factors of”, “Facilities”, Money”, and “Transportation”, as structural and these were found to be the most important constraints to participation in recreational sporting activities. “Social” factors (lack of partner) classified as interpersonal constraints were less important and “Interest”, “Health/Fitness”, and “Skill/Ability” also classified as intra-personal, were reported as the weakest constraints to participation in recreational sporting activities.
- The ES female sample identified the factors of “ Money”, “Time”, and “Facilities” as structural and these were found to be the most important constraints to participation in recreational sporting activities, “Social” factors (lack of partner) classified as interpersonal constraints were less important and “Health/Fitness”, “Interest”, and

“Skill/Ability” also classified as intra-personal, were reported as the weakest constraints to participation recreational sporting activities.

- The IS female sample identified the factors of “Facilities”, “Transportation”, and “Money”, as structural and these were found to be the most important constraints to participation in recreational sporting activities. “Social” factors (lack of partner) classified as interpersonal constraints were less important and “Health/Fitness”, “Interest”, and “Skill/Ability” also classified as intra-personal, were reported as the weakest constraints to participation in recreational sporting activities.

6.5 Demographic Differences in the Perception of Constraints Dimensions

Gender and non-participation and level of participation were utilised as independent variables and were examined in relation to the perception of constraints dimensions for both ES and IS samples.

6.5.1 Gender and Perception of Constraints Dimensions

Table 6.16 and figure 6.1 indicate the mean scores and the standard deviations of male and female ES and IS samples in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two samples were calculated, and the significance of the differences found was evaluated using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between the ES and IS samples ($t = -10.81$, $df = 1098$, $p < .01$). In terms of subscales, statistically again there were significant differences found between ES and IS samples, in the constraints of lack of time ($t = 5.70$, $df = 1098$, $p < .001$), lack of interest ($t = -$

2.39, $df=1098$, $p<.05$), lack of money ($t= -8.03$, $df=1098$, $p<.001$), transportation ($t= -16.50$, $df=1098$, $p<.001$), lack of facilities ($t= -12.59$, $df=1098$, $p<.001$), social factors 'lack of partner' ($t= -10.09$, $df=1098$, $p<.001$), unawareness ($t= -6.69$, $df=1098$, $p<.001$), lack of skill/ability ($t= -5.04$, $df=1098$, $p<.001$), and health/fitness ($t= -3.88$, $df=1098$, $p<.001$).

Table 6-16

T-tests of Constraint factors (Mean Scores) by ES and IS Male and Female combined Samples

Factors	ES n=502		IS n=598		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.95	.53	1.76	.52	5.70	.000
Lack of Interest	1.67	.67	1.77	.73	-2.39	.017
Lack of Money	2.08	.82	2.50	.87	-8.03	.000
Transportation	1.67	.76	2.54	.98	-16.50	.000
Lack of Facilities	1.98	.81	2.62	.84	-12.59	.000
Social(lack of partner)	1.80	.68	2.24	.76	-10.09	.000
Unawareness	1.65	.79	1.98	.86	-6.69	.000
Lack of Skill/Ability	1.80	.78	2.04	.80	-5.04	.000
Health/Fitness	1.61	.56	1.75	.59	-3.88	.000
Total Constraints Scale	1.80	.43	2.08	.43	-10.81	.000

Figure 6.1
Perception of Constraints Dimensions by ES and IS Male and
Female combined Samples

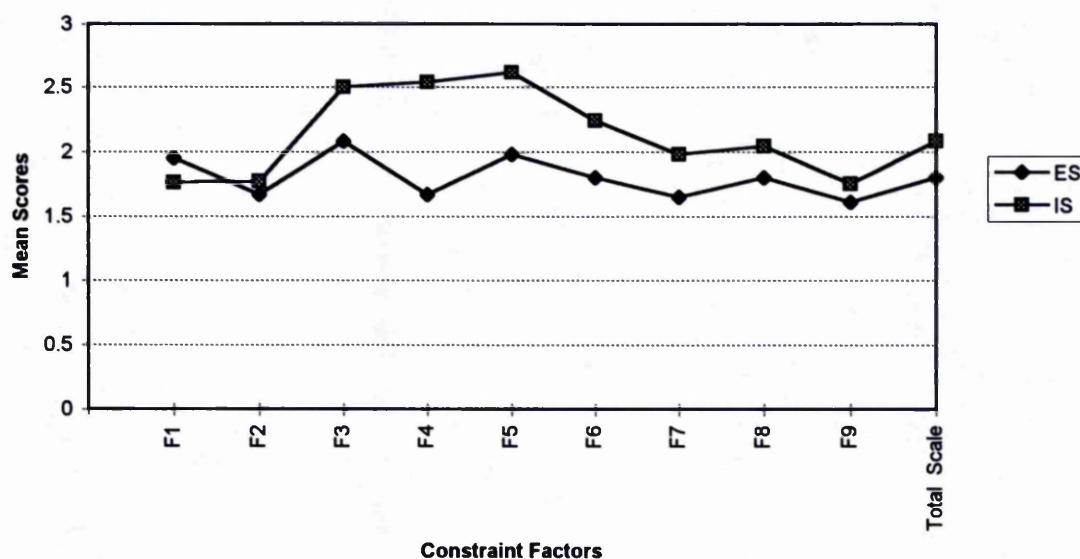


Table 6.17, and figure 6.2 indicate the mean scores and the standard deviation of for males in both male the ES and IS samples in each of the constraints factors, together with the t values for the t -tests, and the significance level. The mean scores of the two samples were calculated, and the significance of the differences was evaluated by using an independent sample t -test (SPSSx). In terms of whole scale, the results indicated that there were significant differences between the ES and IS samples ($t = -6.84$, $df=531$, $p < .01$). In terms of sub-scales, statistically there were significant differences found between ES and IS samples, in the factors of lack of money ($t = -7.55$, $df=531$, $p < .001$), transportation ($t = -9.51$, $df=531$, $p < .001$), lack of facilities ($t = -8.11$, $df=531$, $p < .001$), “social” factors lack of partner ($t = -5.02$, $df=531$, $p < .001$), lack of skill/ability ($t = -4.81$, $df=531$, $p < .001$). On the other hand no significant differences were found between factors such as lack of time, lack of interest, unawareness, and health/fitness.

Table 6-17

T-tests of Constraint factors (Mean Scores) by ES and IS Male Samples

Factors	ES n=252		IS n=281		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.87	.54	1.86	.52	.19	n.s.
Lack of Interest	1.65	.70	1.66	.64	-.30	n.s.
Lack of Money	1.99	.82	2.53	.82	-7.55	.000
Transportation	1.72	.79	2.43	.94	-9.51	.000
Lack of Facilities	2.00	.81	2.57	.78	-8.11	.000
Social(lack of partner)	1.78	.69	2.08	.69	-5.02	.000
Unawareness	1.73	.82	1.80	.76	-1.12	n.s.
Lack of Skill/Ability	1.70	.74	2.02	.78	-4.81	.000
Health/Fitness	1.62	.59	1.68	.56	-1.13	n.s.
Total Constraints Scale	1.77	.45	2.03	.41	-6.84	.000

Figure 6.2
Perception of Constraints Dimensions by ES and IS Male Samples

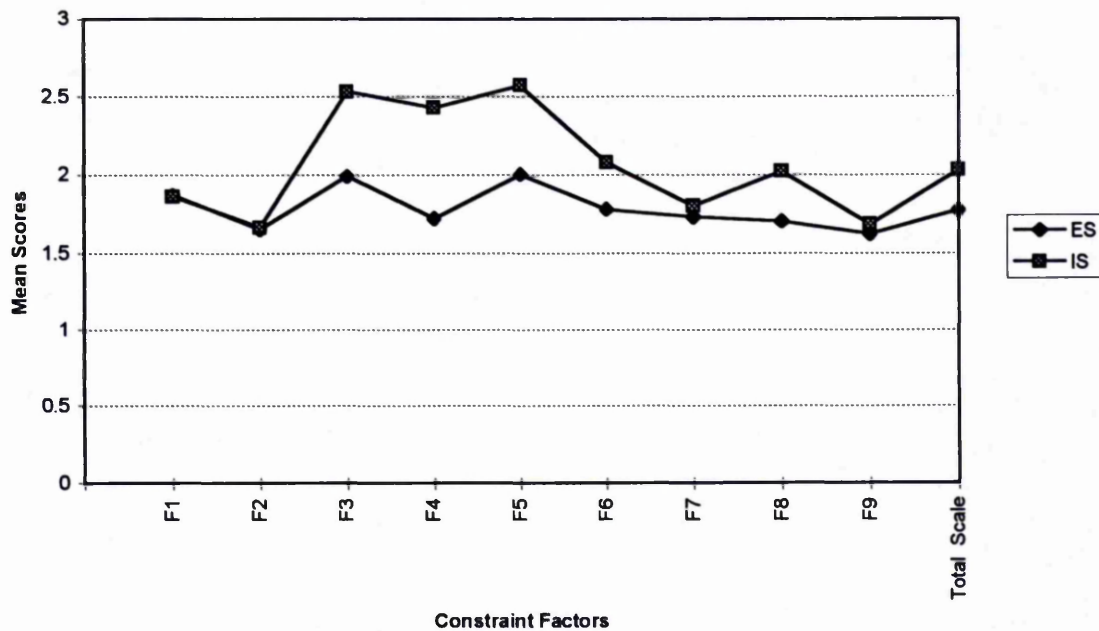


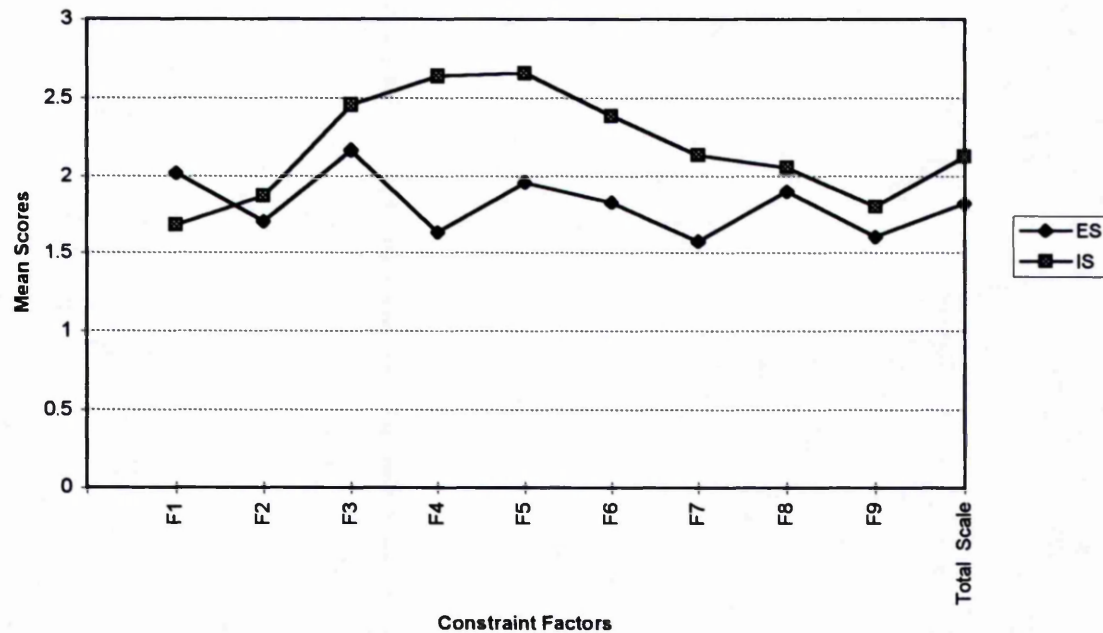
Table 6.18, and figure 6.3 show the mean scores and the standard deviation of females in both the ES and IS samples in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two samples were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between the ES and IS samples ($t = -8.32$, $df=565$, $p<.01$). In terms of sub-scales, statistically again there were significant differences found between ES and IS samples in the factors of lack of time ($t = 7.96$, $df=565$, $p<.001$), lack of interest ($t = -2.90$, $df=565$, $p<.01$), lack of money ($t = -4.00$, $df=565$, $p<.001$), transportation ($t = -13.81$, $df=565$, $p<.001$), lack of facilities ($t = -9.61$, $df=565$, $p<.001$), social factors 'lack of partner' ($t = -9.07$, $df=565$, $p<.001$), unawareness ($t = -8.15$, $df=565$, $p<.001$), lack of skill/ability ($t = -2.36$, $df=565$, $p<.05$), and health/fitness ($t = -4.31$, $df=565$, $p<.001$).

Table 6-18

T-tests of Constraint factors (Mean Scores) by ES and IS Female Samples

Factors	ES n=250		IS n=317		t	p
	Mean	SD	Mean	SD		
Lack of Time	2.02	.52	1.68	.50	7.96	.000
Lack of Interest	1.70	.64	1.87	.78	-2.90	.004
Lack of Money	2.17	.81	2.46	.92	-4.00	.000
Transportation	1.63	.74	2.64	1.01	-13.81	.000
Lack of Facilities	1.96	.81	2.66	.88	-9.61	.000
Social(lack of partner)	1.83	.67	2.39	.79	-9.07	.000
Unawareness	1.57	.75	2.14	.91	-8.15	.000
Lack of Skill/Ability	1.90	.80	2.06	.83	-2.36	.019
Health/Fitness	1.60	.53	1.80	.61	-4.31	.000
Total Constraints Scale	1.82	.42	2.13	.45	-8.32	.000

Figure 6.3
Perception of Constraints Dimensions by ES and IS Female Samples



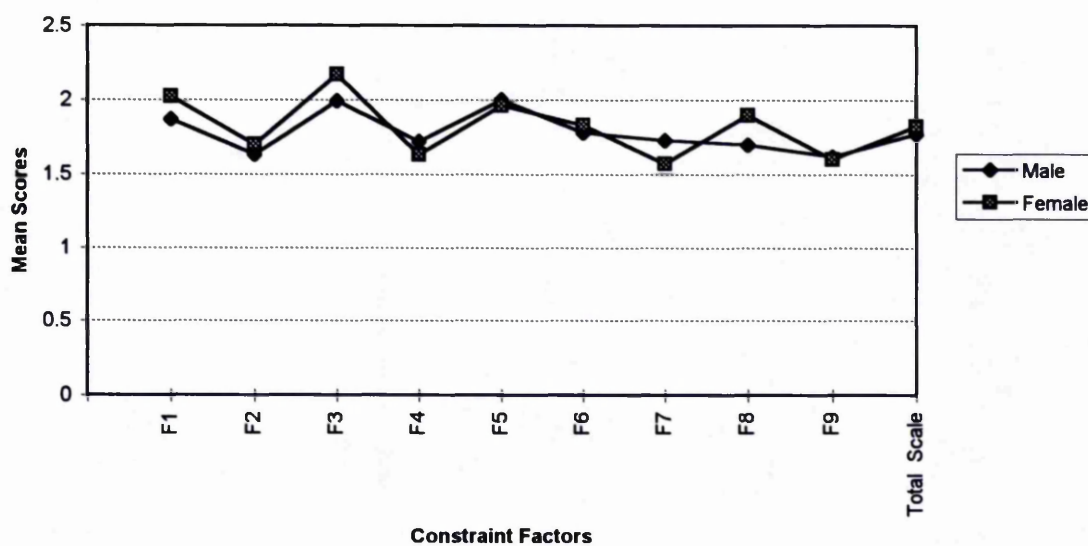
The mean scores and standard deviation in the whole scale and in each of the sub-scales for both males and females in the ES sample were calculated and the significance of the differences was evaluated by using an independent sample t-test (SPSSx, see Table 6.19, and figure 6.4). In term of the whole scale, the results indicated that females ($m=1.82$, $sd=.42$) scored higher than males ($m=1.77$, $sd=.45$) although there were no significant differences between males and females were found. In terms of sub-scales, significant differences between males and females were found in the factors of lack of time ($t= -3.28$, $df=500$, $p<.01$), lack of money ($t= -2.40$, $df=500$, $p<.05$), unawareness ($t= 2.27$, $df=500$, $p<.05$), and lack of skill/ability ($t= -2.90$, $df=500$, $p<.01$).

Table 6-19

T-tests of Constraint factors (Mean Scores) by ES Male and ES Female Samples

Factors	Male n=252		Female n=250		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.87	.54	2.02	.52	-3.28	.001
Lack of Interest	1.65	.70	1.70	.64	-.87	n.s.
Lack of Money	1.99	.82	2.17	.81	-2.40	.017
Transportation	1.72	.79	1.63	.74	1.32	n.s.
Lack of Facilities	2.00	.81	1.96	.81	.59	n.s.
Social(lack of partner)	1.78	.69	1.83	.67	-.94	n.s.
Unawareness	1.73	.82	1.57	.75	2.27	.023
Lack of Skill/Ability	1.70	.74	1.90	.80	-2.90	.004
Health/Fitness	1.62	.59	1.60	.53	.55	n.s.
Total Constraints Scale	1.77	.45	1.82	.42	-1.30	n.s.

Figure 6.4
Perception of Constraints Dimensions by ES Male and ES Female Samples



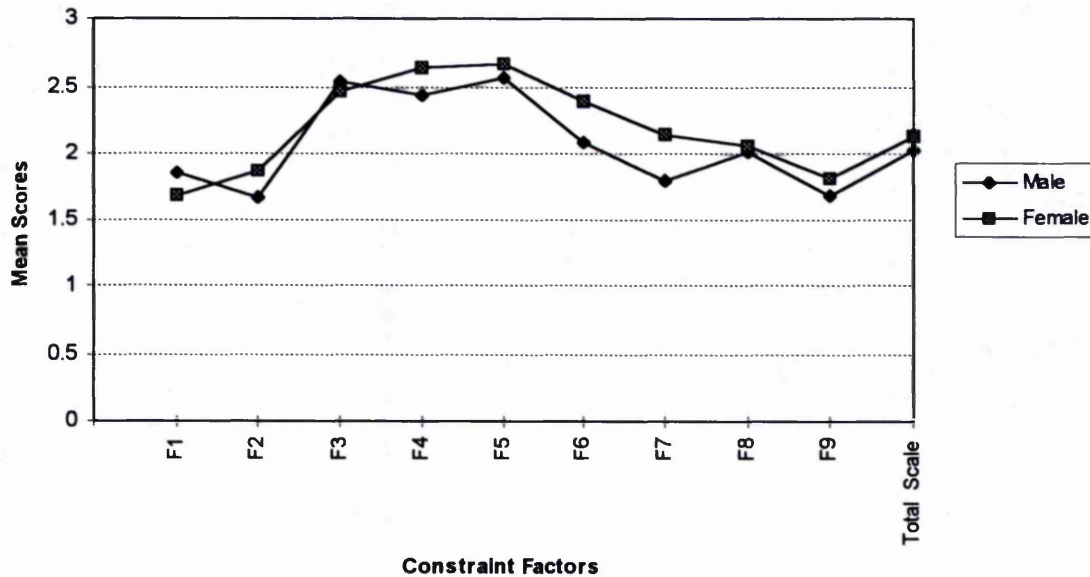
The mean scores and standard deviation in the whole scale and in each of the sub-scales for both males and females in the IS sample were calculated and the significance of the differences was evaluated by using an independent sample t-test (SPSSx, see Table 6.20, and figure 6.5). In terms of the whole scale, the results indicated that females ($m=2.13$, $sd=.45$) scored significantly higher than males ($m=2.03$, $sd=.41$). Significant differences between males and females were found ($t= -3.02$, $df=596$, $p<.01$). In terms of sub-scales, significant differences were found between males and females in the factors of lack of time ($t= 4.30$, $df=596$, $p<.001$), lack of interest ($t= -3.57$, $df=596$, $p<.001$), transportation ($t= -2.65$, $df=596$, $p<.01$), social factors 'lack of partner' ($t= -5.21$, $df=596$, $p<.001$), unawareness ($t= -4.89$, $df=596$, $p<.001$), and health/fitness ($t= -2.59$, $df=596$, $p<.01$).

Table 6-20

T-tests of Constraint factors (Mean Scores) by IS Male and IS Female Samples

Factors	Male n=281		Female n=317		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.86	.52	1.68	.50	4.30	.000
Lack of Interest	1.66	.64	1.87	.78	-3.57	.000
Lack of Money	2.53	.82	2.46	.92	1.03	n.s.
Transportation	2.43	.94	2.64	1.01	-2.65	.008
Lack of Facilities	2.57	.78	2.66	.88	-1.29	n.s.
Social(lack of partner)	2.08	.69	2.39	.79	-5.21	.000
Unawareness	1.80	.76	2.14	.91	-4.89	.000
Lack of Skill/Ability	2.02	.78	2.06	.83	-.67	n.s.
Health/Fitness	1.68	.56	1.81	.61	-2.59	.010
Total Constraints Scale	2.03	.41	2.13	.45	-3.02	.003

Figure 6.5
Perception of Constraints Dimensions by IS Male and IS Female
Samples



6.6 Summary

The analysis of the results was undertaken to examine whether there were any differences between ES and IS samples due to gender differences in both England and Iran.

- The mean scores of two samples (male and female) were calculated, and the significance of the differences found was evaluated using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between the ES and IS samples. In terms of sub-scales, all factors were found to reflect significant differences between the two.
- The mean scores of each of the two male samples were calculated, and the significance of the differences found was evaluated using an independent sample t-test (SPSSx). In

terms of the whole scale, the results indicated that there were significant differences between the ES and IS samples. In terms of sub-scales, statistically there were significant differences found between ES and IS samples in the factors of lack of money, transportation, lack of facilities, social factors 'lack of partner', lack of skill/ability. On the other hand not significant differences were found between factors such as lack of time, lack of interest, unawareness, and health/fitness.

- The mean scores of each of the two female samples were calculated, and the significance of the differences found was evaluated using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between the ES and IS samples. In terms of sub-scales significant differences were found between the two samples for all factors .
- The mean scores and standard deviation in the whole scale in each of the sub-scales for both ES males and females were calculated and the significance of the differences found. In terms of the whole scale, the results indicated that females scored higher than males, although no significant differences between males and females were found. In terms of sub-scales, significant differences were found between lack of time , lack of money, unawareness, and lack of skill/ability.
- The mean scores and standard deviation in the whole scale in each of the sub-scales for both IS males and females were calculated and the significance of the differences found. In terms of the whole scale, the results indicated that females scored significantly higher than males. Significant differences were found between males and females . In terms of sub-scales, there were significant differences between males and females in lack of time, lack of interest, transportation, social 'lack of partner', unawareness, and health/fitness.

6.7 Frequency of Sport Participation and Non-Participation

Table 6.21 indicates the percentage of non-participants and percentage of participants at each level of frequency in terms of number and percentage for the ES sample.

Table 6-21

Non-Participants and Level of Frequency of Participation (Number and Percentage).(ES) Samples						
Level of frequency of participation	Male		Female		Total	
	No	Percent	No	Percent	No	Percent
Once a Week	145	%56.2	113	%43.8	248	%100
Once a Month	44	%40	66	%60	110	%100
Once a Year	14	%41.2	20	%58.8	34	%100
Not at All (non-part)	49	%49	51	%51	100	%100
Total	252		250		502	

Table 6.22 indicates the percentage of non-participants and percentage of participants at each level of frequency in terms of number and percentage for the IS sample

Table 6-22

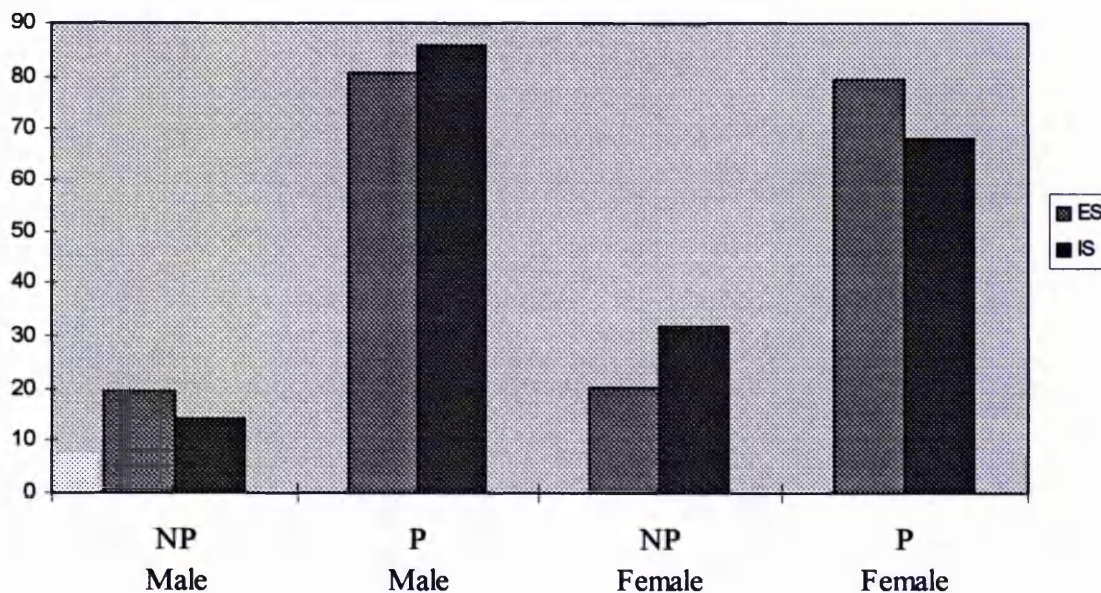
Non-Participants and Level of Frequency of Participation (Number & Percentage).(IS) Samples						
Level of frequency of participation	Male		Female		Total	
	No	Percent	No	Percent	No	Percent
Once a Week	172	%50.7	167	%49.3	339	%100
Once a Month	55	%62.5	33	%37.5	88	%100
Once a Year	14	%46.7	16	%53.3	30	%100
Not at All (non-part)	40	%28.4	101	%71.6	141	%100
Total	281		317		598	

Table 6.23 and figure 6.6 indicate non-participation (NP) and participation (P) in physical activities in the previous year by gender in ES & IS samples (number and percentage of population).

Table 6-23

Non-participation and participation in physical activities in the previous year by Gender in ES and IS sample (N & % of the population)												
Country	Male				Female				Male & Female			
	NP		P		NP		P		NP		P	
	n	%	n	%	n	%	n	%	n	%	n	%
ES	49	19.4	203	80.5	51	20.4	199	79.6	100	19.9	402	80.1
IS	40	14.2	241	85.7	101	31.8	216	68.1	141	23.5	457	76.4
P= Participants NP= Non-Participants %= Percentage												

Figure 6.6
Percentage of Annual Physical Activities Non-Participants and Participants by Demographic Gender in ES and IS samples



6.8 The Relationship between The Perception of Constraints and Sport Participation / Non-Participation

Table 6.24 and figure 6.7 indicate the mean scores and the standard deviation of two groups (non-participants and participants) for male and female ES samples in each of constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of two groups were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between non-participants ($m=1.89$, $sd=.40$) and participants ($m=1.77$, $sd=.44$) and ($t= 2.42$, $df=500$, $p<.05$). In terms of sub-scales, statistically again there were significant differences found between non-participants and participants in the four factors of lack of interest ($t= 6.02$, $df=500$, $p<.001$), lack of facilities ($t= -2.22$, $df=500$, $p<.05$), unawareness ($t= 2.99$, $df=500$, $p<.01$), and lack of skill/ability ($t= 2.54$, $df=500$, $p<.05$).

Table 6-24

T-tests of Constraint factors (Mean Scores) by ES Male and Female combined Sample

Factors	Non-Participants n=100		Participants n=402		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.99	.52	1.93	.54	1.00	n.s.
Lack of Interest	2.02	.64	1.58	.65	6.02	.000
Lack of Money	2.12	.85	2.07	.81	.47	n.s.
Transportation	1.67	.73	1.67	.77	-.06	n.s.
Lack of Facilities	1.82	.79	2.02	.81	-2.22	.027
Social(lack of partner)	1.87	.66	1.79	.68	1.15	n.s.
Unawareness	1.86	.84	1.59	.76	2.99	.003
Lack of Skill/Ability	1.99	.87	1.75	.74	2.54	.012
Health/Fitness	1.67	.56	1.60	.56	1.20	n.s.
Total Constraints Scale	1.89	.40	1.77	.44	2.42	.016

Figure 6.7
Perception of Constraints Dimensions by Participants and Non-Participants for ES Male and Female combined Samples

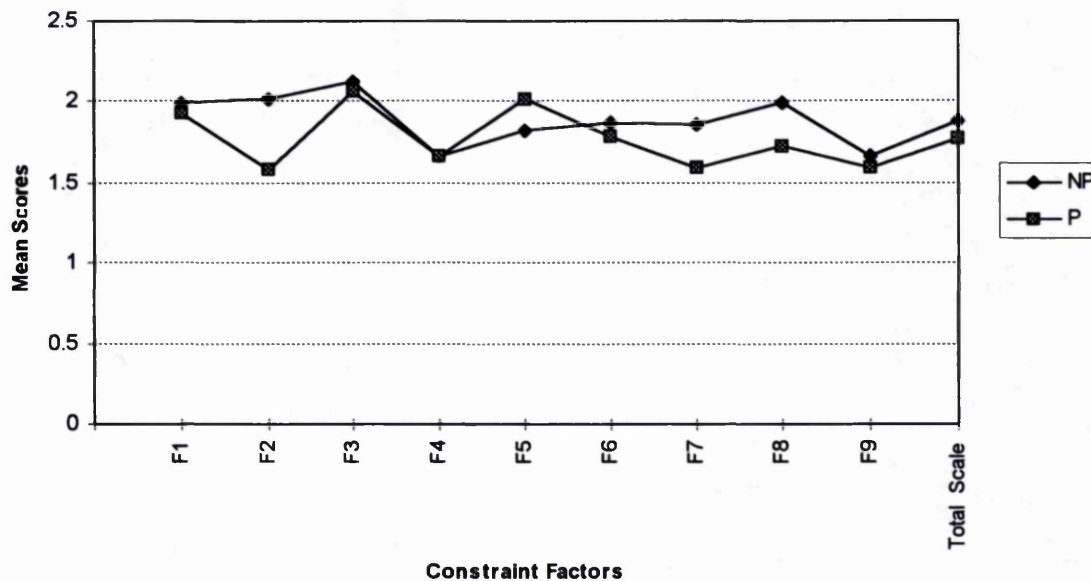


Table 6.25 and figure 6.8 indicate the mean scores and the standard deviation of two groups (non-participants and participants) for male ES samples in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two groups were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between non-participants ($m=1.90$, $sd=.42$) and participants ($m=1.74$, $sd=.45$) and ($t= 2.17$, $df=250$, $p<.05$). In terms of sub-scales, statistically there were significant differences found between non-participants and participants in the four factors of lack of interest ($t= 3.60$, $df=250$, $p<.001$), lack of facilities ($t= -2.25$, $df=250$, $p<.05$), unawareness ($t= 3.21$, $df=250$, $p<.01$), and lack of skill/ability ($t= 2.28$, $df=250$, $p<.05$).

Table 6-25

T-tests of Constraint factors (Mean Scores) for ES Male Sample

Factors	Non-Participants n=49		Participants n=203		t	p
	Mean	SD	Mean	SD		
Lack of Time	2.00	.57	1.84	.52	1.92	.056
Lack of Interest	1.97	.67	1.57	.69	3.60	.000
Lack of Money	2.02	.88	1.99	.81	.26	n.s.
Transportation	1.80	.80	1.70	.78	.79	n.s.
Lack of Facilities	1.77	.83	2.06	.80	-2.25	.026
Social(lack of partner)	1.86	.62	1.75	.70	.97	n.s.
Unawareness	2.06	.86	1.65	.79	3.21	.002
Lack of Skill/Ability	1.91	.84	1.65	.71	2.28	.023
Health/Fitness	1.73	.59	1.60	.58	1.41	n.s.
Total Constraints Scale	1.90	.42	1.74	.45	2.17	.031

Figure 6.8
Perception of Constraints Dimensions by Participants and Non-Participants for ES Male Samples

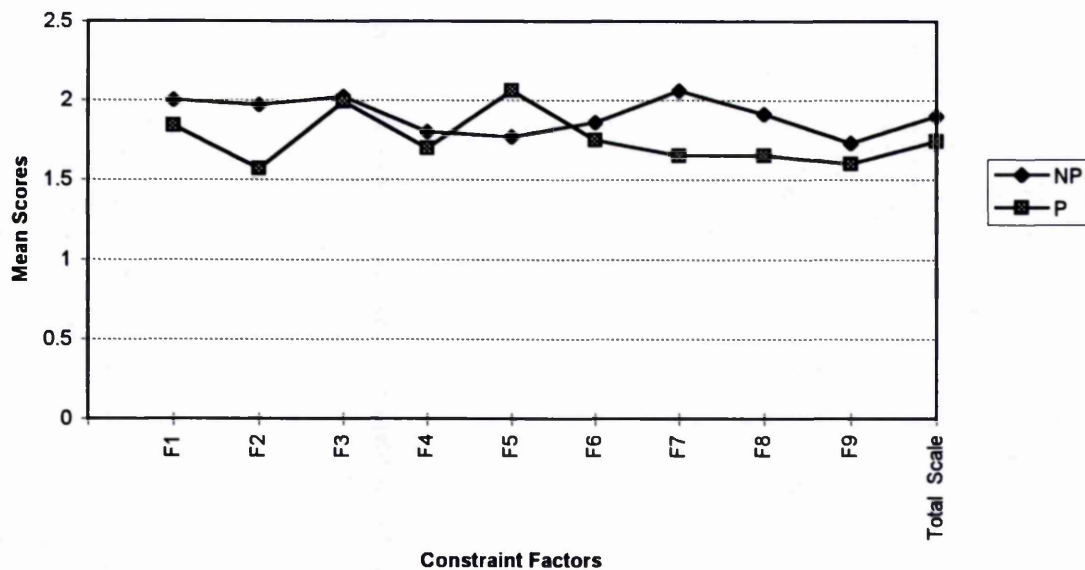


Table 6.26 and figure 6.9 indicate the mean scores and the standard deviation of two groups, non-participants and participants, for the female ES sample in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two groups were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were no significant differences between non-participants and participants. In terms of mean scores, non-participants (m=1.89, sd=.37) were higher than participants (m=1.81, sd=.43). In terms of sub-scales, statistically there were significant differences found between non-participants and participants in only one factor, lack of interest with non-participants (m=2.08, sd=.61) and participants (m=1.60, sd=.61) and (t= 4.98, df=248, p<.001).

Table 6-26

T-tests of Constraint factors (Mean Scores) for ES Female Sample

Factors	Non-Participants n=51		Participants n=199		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.99	.48	2.03	.53	-.55	n.s.
Lack of Interest	2.08	.61	1.60	.61	4.98	.000
Lack of Money	2.21	.83	2.16	.80	.37	n.s.
Transportation	1.54	.64	1.65	.76	-.90	n.s.
Lack of Facilities	1.87	.74	1.99	.82	-.90	n.s.
Social(lack of partner)	1.89	.71	1.82	.66	.63	n.s.
Unawareness	1.66	.79	1.54	.74	1.02	n.s.
Lack of Skill/Ability	2.07	.91	1.86	.77	1.67	n.s.
Health/Fitness	1.61	.52	1.59	.54	.25	n.s.
Total Constraints Scale	1.89	.37	1.81	.43	1.22	n.s.

Figure 6.9
Perception of Constraints Dimensions by Participants and Non-Participants for ES Female Sample

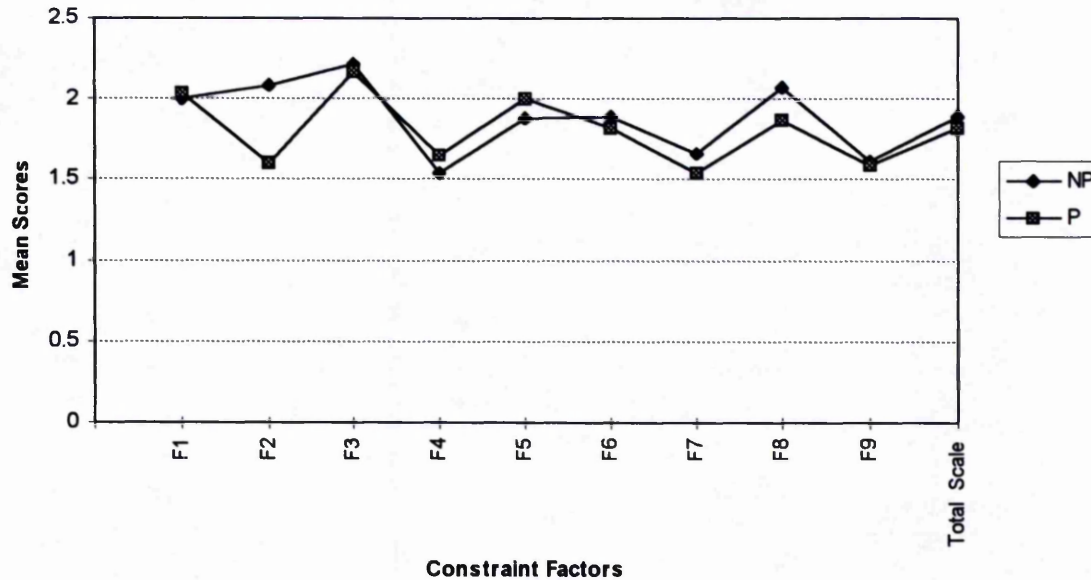


Table 6.27 and figure 6.10 indicate the mean scores and the standard deviation of two groups, non-participants and participants, for males and females in the IS samples in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two groups were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were significant differences between non-participants ($m=2.17$, $sd=.46$) and participants ($m=2.06$, $sd=.42$) and ($t= 2.71$, $df=596$, $p<.01$). In terms of sub-scales, statistically there were significant differences found between non-participants and participants in the six factors of lack of time ($t= -2.36$, $df=596$, $p<.05$), lack of interest ($t= 3.41$, $df=596$, $p<.01$), lack of facilities ($t= -3.20$, $df=596$, $p<.01$), social factors 'lack of partner' ($t= 2.02$, $df=596$, $p<.05$), lack of skill/ability ($t= 6.28$, $df=596$, $p<.001$), and health/fitness ($t= 3.38$, $df=596$, $p<.01$).

Table 6-27

T-tests of Constraint factors (Mean Scores) for IS Male and Female combined Sample

Factors	Non-Participants n=141		Participants n=457		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.67	.49	1.79	.52	-2.36	.018
Lack of Interest	1.98	.87	1.71	.67	3.41	.001
Lack of Money	2.41	.91	2.52	.86	-1.31	n.s.
Transportation	2.57	1.03	2.54	.96	.37	n.s.
Lack of Facilities	2.40	.93	2.68	.80	-3.20	.002
Social(lack of partner)	2.36	.75	2.21	.76	2.02	.044
Unawareness	2.09	.95	1.95	.83	1.58	n.s.
Lack of Skill/Ability	2.45	.92	1.92	.72	6.28	.000
Health/Fitness	1.90	.64	1.70	.56	3.38	.001
Total Constraints Scale	2.17	.46	2.06	.42	2.71	.007

Figure 6.10
Perception of Constraints Dimensions by Participants and Non-Participants for IS Male and Female combined Sample

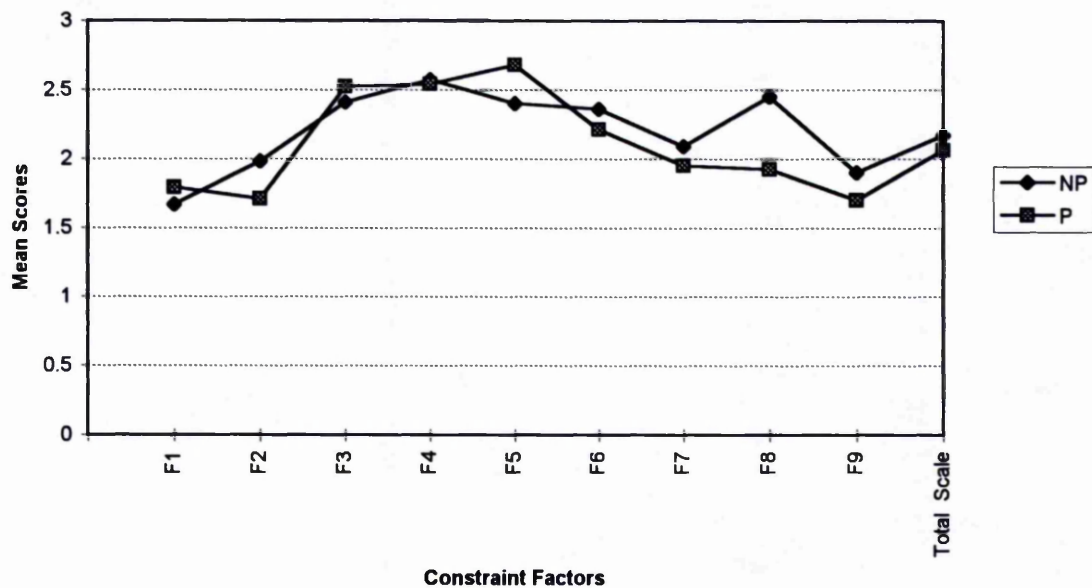


Table 6.28 and figure 6.11 indicate the mean scores and the standard deviation of two groups, non-participants and participants, for males in the IS sample in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two groups were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were no significant differences between non-participants and participants. In terms of mean scores, non-participants ($m=2.14$, $sd=.48$) was higher than participants ($m=2.01$, $sd=.39$). In terms of sub-scales, statistically there were significant differences found between non-participants and participants in the four factors of lack of interest ($t= 2.08$, $df=279$, $p<.05$), lack of facilities ($t= -2.02$, $df=279$, $p<.05$), lack of skill/ability ($t= 5.34$, $df=279$, $p<.001$), and health/fitness ($t= 1.98$, $df=279$, $p<.05$).

Table 6-28

T-tests of Constraint factors (Mean Scores) for IS Male Sample

Factors	Non-Participants n=40		Participants n=241		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.85	.55	1.86	.51	-.17	n.s.
Lack of Interest	1.86	.75	1.63	.62	2.08	.039
Lack of Money	2.38	.87	2.56	.81	-1.30	n.s.
Transportation	2.39	1.07	2.44	.92	-.32	n.s.
Lack of Facilities	2.34	.92	2.61	.75	-2.02	.044
Social(lack of partner)	2.05	.64	2.08	.70	-.25	n.s.
Unawareness	2.02	.93	1.77	.72	1.65	n.s.
Lack of Skill/Ability	2.72	.92	1.90	.69	5.34	.000
Health/Fitness	1.84	.59	1.65	.55	1.98	.049
Total Constraints Scale	2.14	.48	2.01	.39	1.88	n.s.

Figure 6.11
Perception of Constraints Dimensions by Participants and Non-
Participants for IS Male Sample

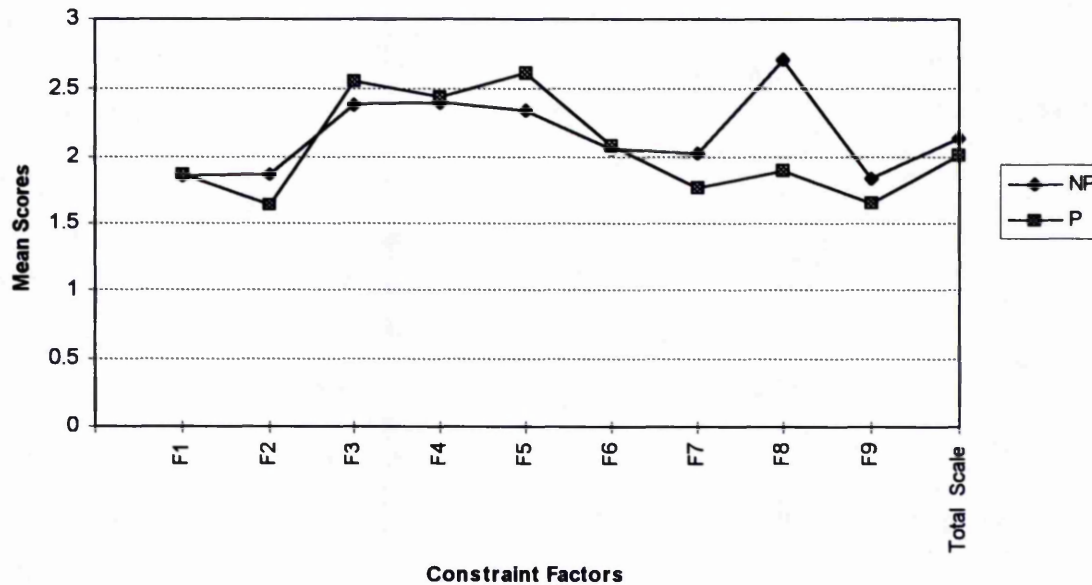


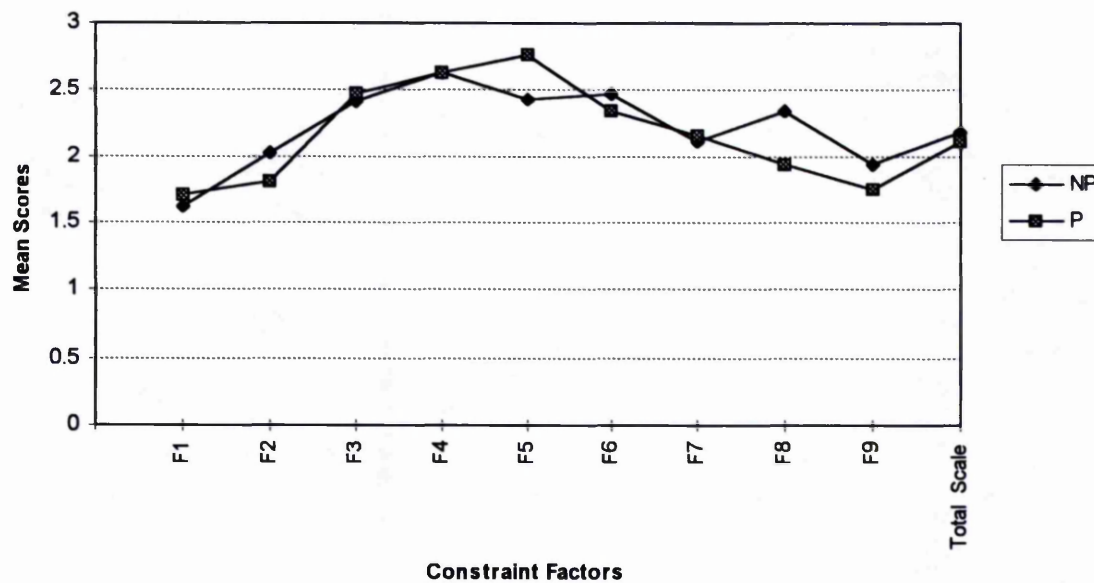
Table 6.29 and figure 6.12 indicates the mean scores and the standard deviation of two groups (non-participants and participants) for females in the IS samples in each of the constraints factors, together with the t values for the t-tests, and the significance level. The mean scores of the two groups were calculated, and the significance of the differences was evaluated by using an independent sample t-test (SPSSx). In terms of the whole scale, the results indicated that there were no significant differences between non-participants and participants. In terms of mean scores non-participants ($m=2.18$, $sd=.45$) were higher than participants ($m=2.11$, $sd=.45$). In terms of sub-scales, statistically there were significant differences found between non-participants and participants in the four factors of lack of interest ($t= 2.26$, $df=315$, $p<.05$), lack of facilities ($t= -3.19$, $df=315$, $p<.01$), lack of skill/ability ($t= 3.94$, $df=315$, $p<.001$), and health/fitness ($t= 2.45$, $df=315$, $p<.05$).

Table 6-29

T-tests of Constraint factors (Mean Scores) for IS Female Sample

Factors	Non-Participants n=101		Participants n=216		t	p
	Mean	SD	Mean	SD		
Lack of Time	1.61	.45	1.71	.52	-1.78	n.s.
Lack of Interest	2.03	.91	1.80	.71	2.26	.025
Lack of Money	2.42	.93	2.48	.91	-.48	n.s.
Transportation	2.64	1.02	2.64	1.00	-.01	n.s.
Lack of Facilities	2.43	.94	2.76	.84	-3.19	.002
Social(lack of partner)	2.11	.97	2.15	.89	-.31	n.s.
Unawareness	2.34	.90	1.93	.76	3.94	.000
Lack of Skill/Ability	1.93	.67	1.75	.58	2.45	.015
Health/Fitness	2.18	.45	2.11	.45	1.31	n.s.
Total Constraints Scale	2.14	.48	2.01	.39	1.88	n.s.

Figure 6.12
Perception of Constraints Dimensions by Participants and Non-Participants for IS Female Sample



6.9 Summary

In summary, the results regarding the relationship between perception of constraints and sport participation / non-participation indicated that:

- For the ES male and female combined sample, in terms of the whole scale, there were significant differences between non-participants and participants. In terms of sub-scales, statistically again significant differences were found between non-participants and participants in the four factors of lack of interest, lack of facilities, unawareness, and lack of skill/ability
- For the ES male sample, in terms of the whole scale, there were significant differences between non-participants and participants. In terms of sub-scales, statistically, significant differences were found between non-participants and participants in the four factors of lack of interest, lack of facilities, unawareness, and lack of skill/ability.
- For the ES female sample, in terms of the whole scale, there were no significant differences between non-participants and participants. In terms of mean scores, non-participants were higher than participants. In terms of sub-scales, statistically significant differences were found between non-participants and participants in only one factor, lack of interest.
- For the IS male and female combined sample, in terms of the whole scale, there were significant differences between non-participants and participants. In terms of sub-scales, statistically significant differences were found between non-participants and participants in the six factors of lack of time, lack of interest, lack of facilities, social 'lack of partner', lack of skill/ability, and health/fitness.
- For the IS male sample, in terms of the whole scale, there were no significant differences between non-participants and participants. In terms of mean scores, non-

participants were higher than participants. In terms of sub-scales, statistically significant differences were found between non-participants and participants in the four factors of lack of interest, lack of facilities, lack of skill/ability, and health/fitness.

- For the IS female sample, in terms of the whole scale, there were no significant differences between non-participants and participants. In terms of mean scores, non-participants were higher than participants. In terms of sub-scales, statistically significant differences were found between non-participants and participants in the four factors of lack of interest, lack of facilities, lack of skill/ability, and health/fitness.
- Constraints as a whole were negatively correlated with participation in sport, which suggests that as the perception of constraints increased, participation in sport decreased.

6.10 The Relationship between Perception of Constraints and Frequency of Participation in Sport

The mean scores of the three participant groups (rare, moderate, and frequent participants) in the constraints factors were calculated and the significance of the differences were evaluated using a one-way ANOVA.

For male and female (ES) samples, the results are presented in table 6.30 and figure 6.13. Comparisons between the three groups' scores in the whole scale and in the sub-scales revealed significant differences. In terms of the whole scale, the scores significantly ($F=12.78$, $p<.001$) decreased with the frequency of participation in sport. The rare participants had the highest mean score ($m=79.82$), followed by the moderate ($m=69.39$) and frequent ($m=65.20$) participants. Post-hoc investigation (Scheffe's test) revealed significant differences between the scores of the rare ($m=79.82$) and both the moderate

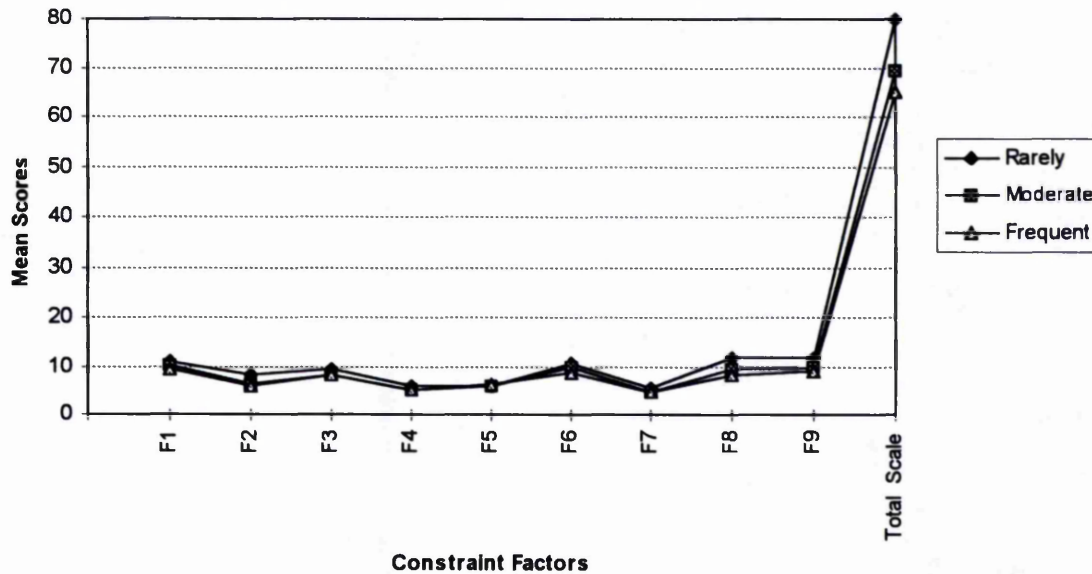
($m=69.39$) and the frequent ($m=65.20$) participants. In terms of the constraints dimensions, significant differences were found in five of them, namely lack of time, lack of interest, social (lack of partner), lack of skill/ability, and health/fitness. Scores in terms of access to facilities dimension increased with the frequency of participation in sport, rare ($m=5.70$), moderate ($m=5.83$) and frequent ($m=6.24$). The most significant differences ($F=16.95$, $p<.001$) were found in the skill/ability dimension. The frequent participants ($m=8.15$) scored significantly lower than both the rare ($m=11.79$) and the moderate ($m=9.29$) participants. The rare participants had the highest mean scores in the lack of skill/ability ($m=11.79$). In both the moderate ($m=10.31$) and the frequent ($m=9.23$) participants, the highest mean scores were revealed in lack of time

Table 6-30

One-way ANOVA of constraint factors (mean scores) by participant group ES Male and Female combined Sample

Factors	Rarely Participant	Moderate Participant	Frequent Participant	F	P	Scheffe test
Lack of Time	11.11	10.31	9.23	12.07	.0000	4(2-3)
Lack of Interest	8.38	6.46	6.03	12.81	.0000	2(4-3)
Lack of Money	9.29	8.04	8.28	1.94	n.s.	n.s.
Transportation	5.73	5.07	4.92	1.84	n.s.	n.s.
Lack of Facilities	5.70	5.83	6.24	1.49	n.s.	n.s.
Social (lack of partner)	10.52	9.61	8.46	8.52	.0002	4(2-3)
Unawareness	5.55	4.79	4.69	2.11	n.s.	n.s.
Lack of Skill/Ability	11.79	9.29	8.15	16.95	.0000	4(2-3) 2(4-3)
Health/Fitness	11.70	9.96	9.16	9.74	.0001	2(4-3)
Total constraints Scales	79.82	69.39	65.20	12.78	.0000	2(4-3)
* Indicates which category was significant using the Tukey (HSD) post hoc test						

Figure 6.13
Perception of Constraints Dimension by Frequency of Sport
Participation for ES Male and Female combined Sample



For male (ES) samples, the results are presented in table 6.31 and figure 6.14. Comparisons between the three groups' scores in the whole scale and in the sub-scales revealed significant differences. In terms of the whole scale, the scores significantly ($F=8.43$, $p<.001$) decreased with the frequency of participation in sport. The rare participants had the highest mean score ($m=82.78$), followed by the moderate ($m=68.36$) and frequent ($m=64.18$) participants. Post-hoc investigation (Scheffe's test) revealed significant differences between the rare ($m=82.78$) and both the moderate ($m=68.36$) and the frequent ($m=64.18$) participants' scores. In terms of the constraints dimensions, significant differences were found in five of them, namely lack of time, lack of interest, lack of money, social factors (lack of partner), and lack of skill/ability. Scores in two dimensions did not decrease with the frequency of participation in sport first, access to facilities (rare, $m=6.07$), (moderate, $m=5.75$) and (frequent, $m=6.34$) and second, lack of money (rare, $m=10.00$), (moderate,

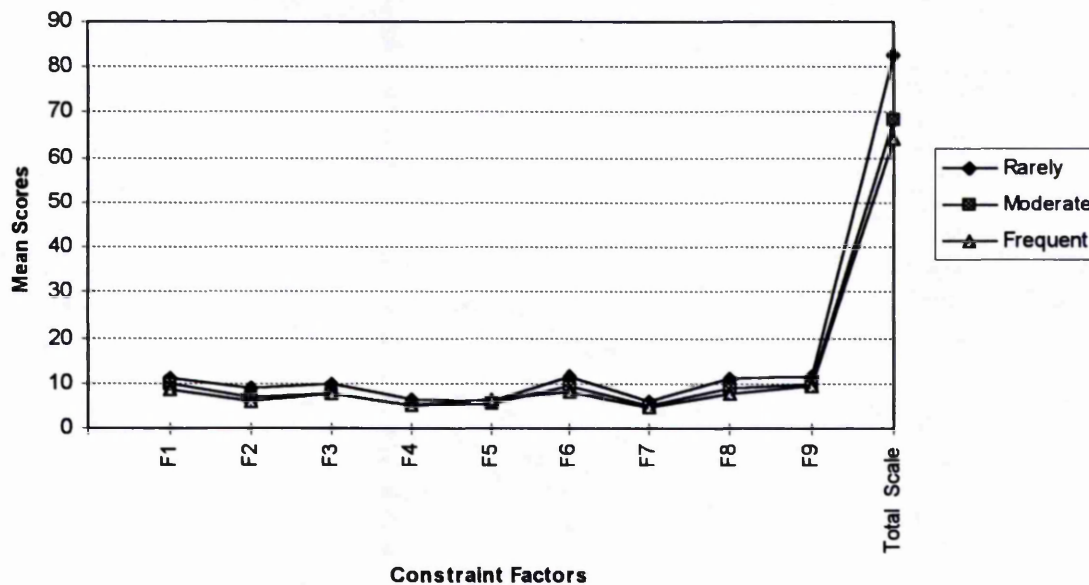
m=7.68) and (frequent, m=7.85). The most significant differences ($F=9.29$, $p<.001$) were found in the lack of interest dimension. The frequent participants (m=5.89) scored significantly lower than both the rare (m=9.00) and the moderate (m=6.72) participants. The moderate participants had the highest mean scores in the lack of time (m=9.93) In both the rare (m=11.57), and the frequent (m=9.35) participants, the highest mean scores were revealed in health/fitness.

Table 6-31

One-way ANOVA of constraint factors (mean scores) by participant group ES Male Sample

Factors	Rarely Participant	Moderate Participant	Frequent Participant	F	P	Scheffe test
Lack of Time	11.14	9.93	8.79	7.69	.0006	4(2-3)
Lack of Interest	9.00	6.72	5.89	9.29	.0001	2(4-3)
Lack of Money	10.00	7.68	7.85	3.07	.0486	n.s.
Transportation	6.35	5.16	4.97	2.23	n.s.	n.s.
Lack of Facilities	6.07	5.75	6.34	1.04	n.s.	n.s.
Social (lack of partner)	11.50	9.29	8.37	5.85	.0034	2-4
Unawareness	6.00	5.02	4.82	1.60	n.s.	n.s.
Lack of Skill/Ability	11.14	8.93	7.76	7.16	.0010	2-4
Health/Fitness	11.57	9.86	9.35	2.71	n.s.	n.s.
Total constraints Scales	82.78	68.36	64.18	8.43	.0003	2(4-3)
* Indicates which category was significant using the Tukey (HSD) post hoc test						

Figure 6.14
Perception of Constraints Dimension by Frequency of Sport
Participation for ES Male Sample



For female (ES) samples, the results are presented in table 6.32 and figure 6.15.

Comparisons between the three groups' scores in the whole scale and in the sub-scales revealed significant differences. In terms of the whole scale, the scores significantly ($F=4.32$, $p<.05$) decreased with the frequency of participation in sport. The rare participants had the highest mean score ($m=77.75$), followed by the moderate ($m=70.07$) and frequent ($m=66.50$) participants. Post-hoc investigation (Scheffe's test) revealed significant differences between the rare ($m=77.75$) and both the moderate ($m=70.07$) and the frequent ($m=66.50$) participants' scores. In terms of the constraints dimensions, significant differences were found in five of them, namely lack of time, lack of interest, social (lack of partner), lack of skill/ability, and health/fitness. Scores in two dimensions did not decrease with the frequency of participation in sport first, access to facilities (rare, $m=5.45$), (moderate, $m=5.89$) and (frequent, $m=6.10$) and second, lack of money (rare, $m=8.80$),

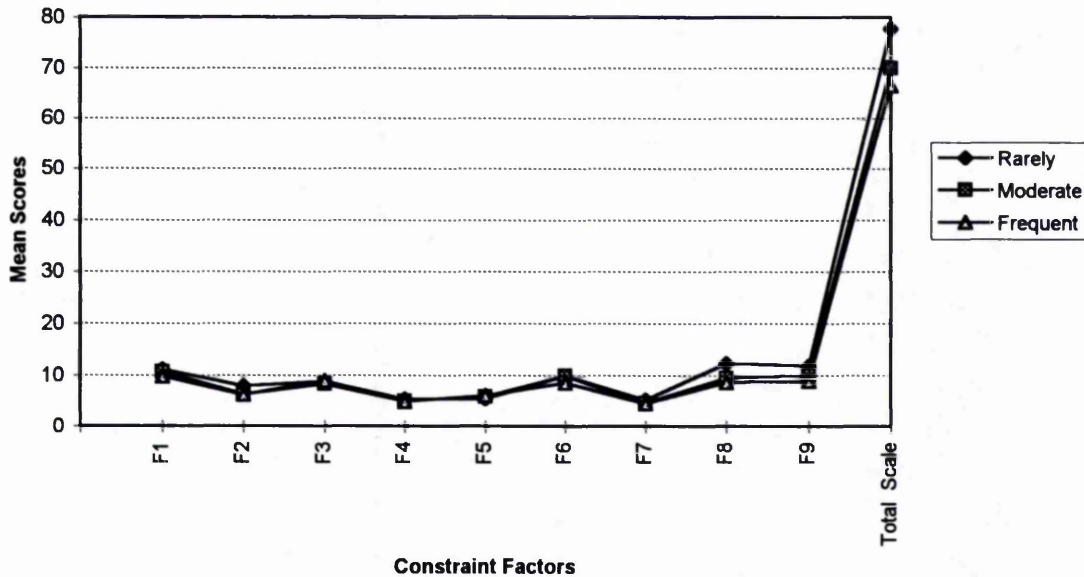
(moderate, $m=8.28$) and (frequent, $m=8.84$). The most significant differences ($F=8.17$, $p<.001$) were found in the lack of skill/ability and health/fitness ($F=8.16$, $p<.001$) dimensions. The frequent participants scored significantly lower in the lack of skill/ability ($m=8.64$) than both the rare ($m=12.25$) and the moderate ($m=9.53$) participants. The rare participants had the highest mean scores in lack of skill/ability ($m=12.25$). In both the moderate ($m=10.57$), and the frequent ($m=9.79$) participants the highest mean scores were revealed in lack of time

Table 6-32

**One-way ANOVA of constraint factors (mean scores) by participant group ES
Female Sample**

Factors	Rarely Participant	Moderate Participant	Frequent Participant	F	P	Scheffe test
Lack of Time	11.10	10.57	9.79	3.13	.0459	n.s.
Lack of Interest	7.95	6.28	6.22	4.51	.0121	2(4-3)
Lack of Money	8.80	8.28	8.84	.63	n.s.	n.s.
Transportation	5.30	5.01	4.86	.33	n.s.	n.s.
Lack of Facilities	5.45	5.89	6.10	.63	n.s.	n.s.
Social (lack of partner)	9.85	9.81	8.57	3.52	.0315	n.s.
Unawareness	5.25	4.63	4.53	.88	n.s.	n.s.
Lack of Skill/Ability	12.25	9.53	8.64	8.17	.0004	2(4-3)
Health/Fitness	11.80	10.03	8.92	8.16	.0004	2-4
Total constraints Scales	77.75	70.07	66.50	4.32	.0146	2-4
* Indicates which category was significant using the Tukey (HSD) post hoc test						

Figure 6.15
Perception of Constraints Dimension by Frequency of Sport
Participation for ES Female Sample



For male and female (IS) samples, the results are presented in table 6.33 and figure 6.16. Comparisons between the three groups' scores in the whole scale and in the sub-scales revealed no significant differences. In terms of the whole scale, they decreased with the frequency of sport participation. The rare participants had the highest mean score ($m=83.56$), followed by the moderate ($m=80.04$) and frequent ($m=77.44$) participants. Post-hoc investigation (Scheffe's test) revealed no significant differences between participants' scores. In terms of the constraints dimensions, significant differences were found in only one dimension, namely lack of skill/ability ($F=3.90$, $p<.05$). Scores in two dimensions did not decrease with the frequency of participation in sport, first, lack of interest (rare, $m=7.36$), (moderate, $m=6.69$) and (frequent, $m=6.85$) and second, unawareness (rare, $m=5.90$), (moderate, $m=6.17$) and (frequent, $m=5.76$). The most significant differences ($F=3.90$ $p<.05$) were found in the lack of skill/ability dimension. The

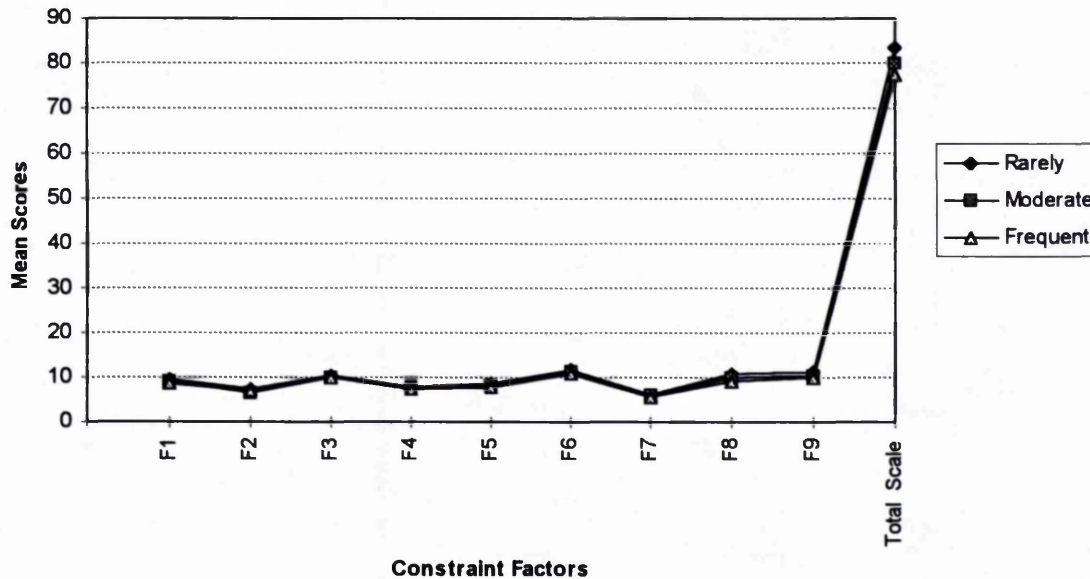
frequent participants in the lack of skill/ability ($m=9.33$) scored significantly lower than both the rare ($m=10.83$) and the moderate ($m=10.20$) participants. Rare ($m=11.93$), moderate ($m=11.41$) and frequent ($m=10.90$) participants had the highest mean scores in the social (lack of partner) dimension.

Table 6-33

One-way ANOVA of constraint factors (mean scores) by participant group IS Male and Female combined Sample

Factors	Rarely Participant	Moderate Participant	Frequent Participant	F	P	Scheffe test
Lack of Time	9.40	9.22	8.87	1.04	n.s.	n.s.
Lack of Interest	7.36	6.69	6.85	.70	n.s.	n.s.
Lack of Money	10.40	10.20	10.04	.19	n.s.	n.s.
Transportation	7.83	7.66	7.59	.10	n.s.	n.s.
Lack of Facilities	8.50	8.18	7.98	.78	n.s.	n.s.
Social (lack of partner)	11.93	11.41	10.90	1.43	n.s.	n.s.
Unawareness	5.90	6.17	5.76	.92	n.s.	n.s.
Lack of Skill/Ability	10.83	10.20	9.33	3.90	.0208	n.s.
Health/Fitness	11.40	10.29	10.08	2.09	n.s.	n.s.
Total constraints Scales	83.56	80.04	77.44	2.59	n.s.	n.s.
* Indicates which category was significant using the Tukey (HSD) post hoc test						

Figure 6.16
Perception of Constraints Dimension by Frequency of Sport
Participation for IS Male and Female combined Sample



For male (IS) samples, the results are presented in table 6.34 and figure 6.17. Comparisons between the three groups' scores in the whole scale and in the sub-scales revealed no significant differences. In terms of the whole scale, they decreased with the frequency of participation in sport. The rare participants had the highest mean score ($m=83.50$), followed by the moderate ($m=77.49$) and frequent ($m=75.60$) participants. Post-hoc investigation (Scheffe's test) revealed no significant differences between participants' scores. In terms of the constraints dimensions, significant differences were found in only one dimension, namely lack of skill/ability ($F=3.16$, $p<.05$). Scores in three dimensions did not decrease with the frequency of participation in sport, first, transportation (rare, $m=7.64$), (moderate, $m=7.01$) and (frequent, $m=7.40$), second, social 'lack of partner' (rare, $m=12.21$), (moderate, $m=9.98$) and (frequent, $m=10.41$) and thirdly, unawareness (rare, $m=5.64$), (moderate, $m=5.72$) and (frequent, $m=5.15$). The most significant differences ($F=3.16$, $p<.05$) were

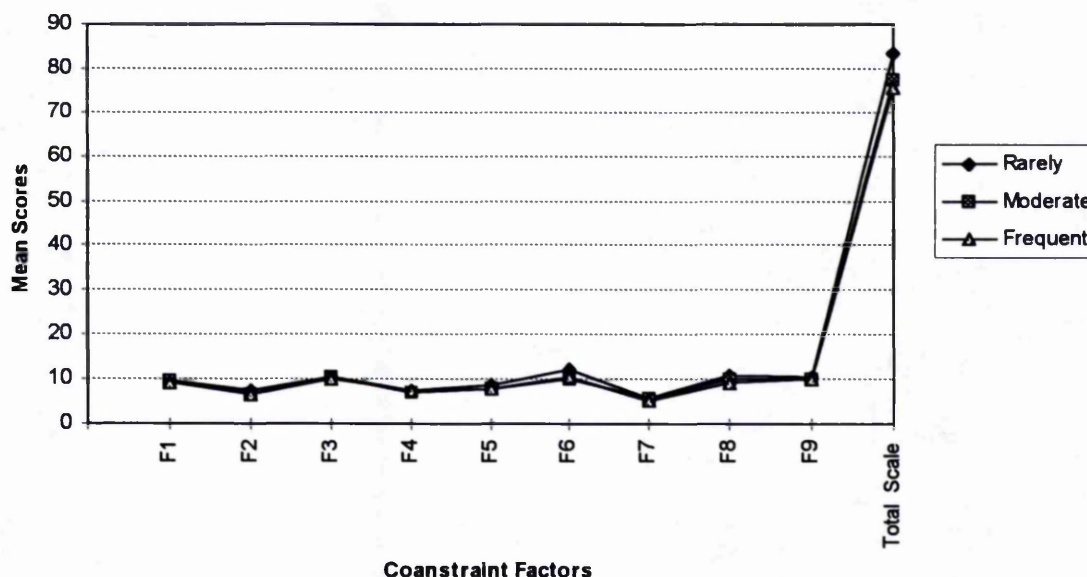
found in the lack of skill/ability dimension. The frequent participants in the lack of skill/ability ($m=9.18$) scored significantly lower than both the rare ($m=10.92$) and the moderate ($m=10.23$) participants. The moderate participants had the highest mean scores in the lack of money ($m=10.38$). In both the rare ($m=12.21$), and the frequent ($m=10.41$) participants, the highest mean scores were revealed in the social (lack of partner) dimension.

Table 6-34

One-way ANOVA of constraint factors (mean scores) by participant group IS Male Sample

Factors	Rarely Participant	Moderate Participant	Frequent Participant	F	P	Scheffe test
Lack of Time	9.78	9.47	9.24	.39	n.s.	n.s.
Lack of Interest	7.42	6.61	6.44	1.05	n.s.	n.s.
Lack of Money	10.50	10.38	10.19	.10	n.s.	n.s.
Transportation	7.64	7.01	7.40	.49	n.s.	n.s.
Lack of Facilities	8.71	8.03	7.69	1.59	n.s.	n.s.
Social (lack of partner)	12.21	9.98	10.41	2.27	n.s.	n.s.
Unawareness	5.64	5.72	5.15	1.64	n.s.	n.s.
Lack of Skill/Ability	10.92	10.23	9.18	3.16	.0440	n.s.
Health/Fitness	10.64	10.01	9.86	.37	n.s.	n.s.
Total constraints Scales	83.50	77.49	75.60	1.98	n.s.	n.s.
* Indicates which category was significant using the Tukey (HSD) post hoc test						

Figure 6.17
Perception of Constraints Dimension by Frequency of Sport
Participation for IS Male Sample



For female (IS) samples, the results are presented in table 6.35 and figure 6.18.

Comparisons between the three groups' scores in the whole scale and in the sub-scales revealed no significant differences. In terms of the whole scale, they did not decrease with the frequency of participation in sport. The moderate participants had the highest mean score ($m=84.30$), followed by the rare ($m=83.62$) and frequent ($m=79.33$) participants. Post-hoc investigation (Scheffe's test) revealed no significant differences between participants' scores. In terms of the constraints dimensions, significant differences were found in only one dimension, namely social 'lack of partner' ($F=5.00$, $p<.01$). Scores in five dimensions did not decrease with the frequency of sport participation, a) lack of interest (rare, $m=7.31$), (moderate, $m=6.81$), and (frequent, $m=7.27$), b) transportation (rare, $m=8.00$), (moderate, $m=8.72$) and (frequent, $m=7.78$), c) lack of facilities (rare, $m=8.31$), (moderate, $m=8.42$), and (frequent, $m=8.28$), d) social 'lack of partner' (rare, $m=11.68$),

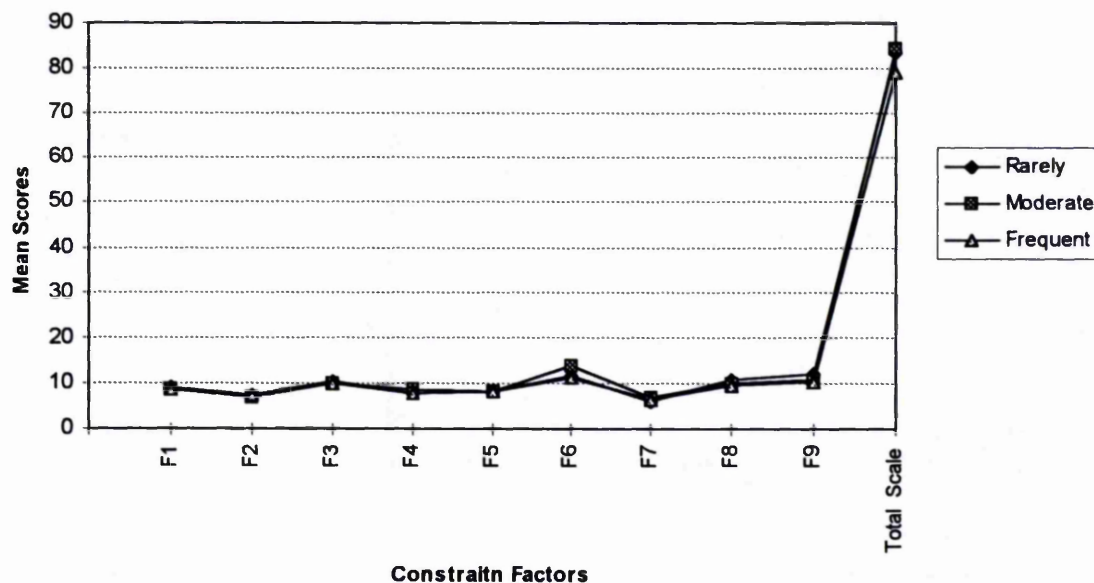
(moderate, $m=13.78$) and (frequent, $m=11.40$) and e) unawareness (rare, $m=6.12$), (moderate, $m=6.91$) and (frequent, $m=6.40$). The most significant differences ($F=5.00$, $p<.01$) were found in the social (lack of partner) dimension. The frequent participants in the social 'lack of partner' ($m=11.40$) scored significantly lower than both the rare ($m=11.68$) and the moderate ($m=13.78$) participants. The rare participants had the highest mean scores in the health/fitness ($m=12.06$) In both the moderate ($m=13.78$), and the frequent ($m=11.40$) participants, the highest mean scores were revealed in the social (lack of partner) dimension.

Table 6-35

One-way ANOVA of constraint factors (mean scores) by participant group IS Female Sample

Factors	Rarely Participant	Moderate Participant	Frequent Participant	F	P	Scheffe test
Lack of Time	9.06	8.81	8.49	.49	n.s.	n.s.
Lack of Interest	7.31	6.81	7.27	.36	n.s.	n.s.
Lack of Money	10.31	9.91	9.89	.09	n.s.	n.s.
Transportation	8.00	8.72	7.78	1.34	n.s.	n.s.
Lack of Facilities	8.31	8.42	8.28	.04	n.s.	n.s.
Social (lack of partner)	11.68	13.78	11.40	5.00	.0075	3-4
Unawareness	6.12	6.91	6.40	.62	n.s.	n.s.
Lack of Skill/Ability	10.75	10.15	9.48	1.10	n.s.	n.s.
Health/Fitness	12.06	10.75	10.31	1.95	n.s.	n.s.
Total constraints Scales	83.62	84.30	79.33	1.45	n.s.	n.s.
* Indicates which category was significant using the Tukey (HSD) post hoc test						

Figure 6.18
Perception of Constraints Dimension by Frequency of Sport
Participation for IS Female Sample



6.11 Summary

In summary, the results regarding the relationship between perception of constraints and participation in sport indicated that:

- For the ES male and female combined sample, in terms of the whole scale, the scores significantly decreased with the frequency of participation in sport. In terms of the constraints dimensions, significant differences were found in five of them, namely lack of time, lack of interest, social (lack of partner), lack of skill/ability, and health/fitness. The rare participants had the highest mean scores in the lack of skill/ability. In both the moderate and the frequent participants the highest mean scores were revealed in lack of time

- For the ES male sample, in terms of the whole scale, the scores significantly decreased with the frequency of participation in sport. In terms of the constraints dimensions, significant differences were found in five of them, namely lack of time, lack of interest, lack of money, social (lack of partner), and lack of skill/ability. The moderate participants had the highest mean scores in lack of time. In both the rare and the frequent participants the highest mean scores were revealed in health/fitness.
- For the ES female sample, in terms of the whole scale, the scores significantly decreased with the frequency of participation in sport. In terms of the constraints dimensions, significant differences were found in five of them, namely lack of time, lack of interest, social (lack of partner), lack of skill/ability, and health/fitness. The rare participants had the highest mean scores in the lack of skill/ability dimension. In both the moderate and the frequent participants the highest mean scores were revealed in the time dimension.
- For the IS male and female combined sample, in terms of the whole scale, scores decreased with the frequency of participation in sport. In terms of the constraints dimensions, significant differences were found in only one dimension, namely lack of skill/ability. All of the three level of participant (rare, moderate, and frequent) had the highest mean scores in the social (lack of partner) dimension.
- For the IS male sample, in terms of the whole scale, scores decreased with the frequency of participation in sport. In terms of the constraints dimensions, significant differences were found in only one dimension, namely lack of skill/ability. The moderate participants had the highest mean scores in the lack of money dimension. In both the rare and the frequent participants the highest mean scores were revealed in the social (lack of partner) dimension.
- For the IS female sample, in terms of the whole scale, scores did not decrease with the frequency of participation in sport. In terms of the constraints dimensions, significant differences were found in only one dimension, namely social 'lack of partner'. The rare

participants had the highest mean scores in the health/fitness dimension. In both the moderate and the frequent participants the highest mean scores were revealed in the social (lack of partner) dimension.

6.12 Two Way ANOVA for the Both ES and IS samples

Further analysis was conducted to examine possible differences between the ES and IS groups, employing two-way ANOVA and to establish the differences between the groups in relation to the dependent variables. The mean scores of the two ES and IS sample groups, in the nine constraint factors were calculated, and the significance of the differences found were evaluated using a 2-way ANOVA test (SPSSx).

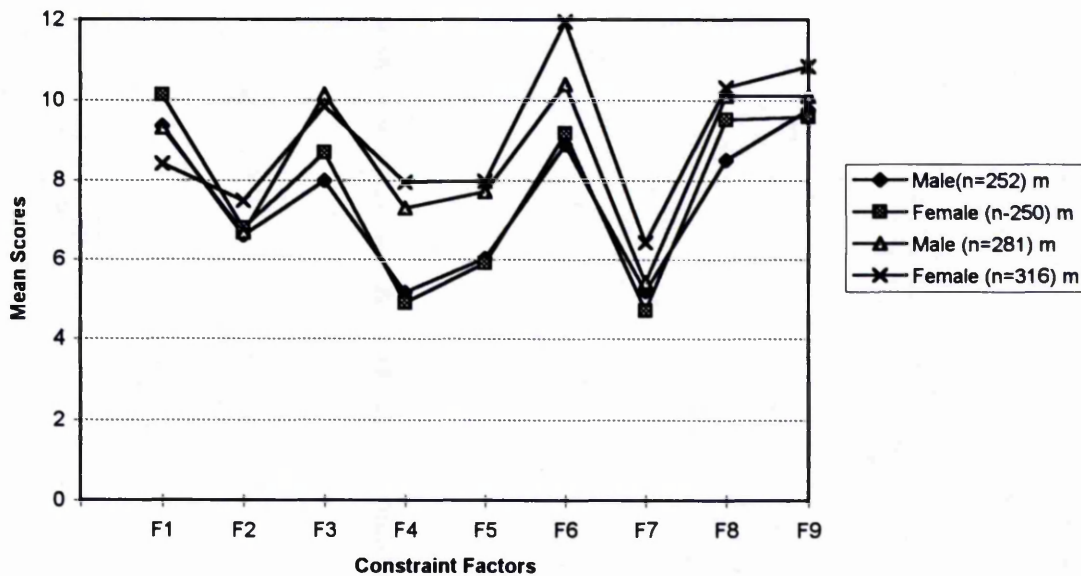
A 2-way Country (England & Iran) by (male & female) as Sex (2 by 2) MANOVA was conducted in order to examine whether any differences in samples' constraints on participation in recreational sporting activities could be attributed to their country or their sex or to an interaction between the two. An analysis was made of the samples' scores on each of the sub-scales of the nine factors (time, interest, money, transportation, facilities, social factors (lack of partner), awareness, skill/ability, health/fitness) as dependent variables with country (England and Iran) and sex (male and female) as independent variables. In both England and Iran, the female groups had more constraints than the male ones (see Table 6.36 and Figure 6.19). MANOVA was utilised for the analysis with an adjustment for non-orthogonality.

Table 6-36

**two-way ANOVA of Constraint factors (Mean Scores and Standard Deviation) for
ES and IS male and female combined samples**

COUNTRY	ENGLAND				IRAN			
	Male (n=252)		Female (n=250)		Male (n=281)		Female (n=316)	
Factors	m	sd	m	sd	m	sd	m	sd
Lack of Time	9.36	2.69	10.14	2.62	9.31	2.60	8.42	2.51
Lack of Interest	6.60	2.83	6.80	2.56	6.67	2.58	7.49	3.14
Lack of Money	7.99	3.29	8.69	3.24	10.15	3.30	9.85	3.68
Transportation	5.16	2.37	4.89	2.22	7.30	2.82	7.95	3.03
Lack of Facilities	6.02	2.45	5.90	2.43	7.72	2.35	7.98	2.66
Social (lack of partner)	8.89	3.44	9.18	3.38	10.40	3.47	11.96	3.96
Unawareness	5.19	2.45	4.71	2.25	5.42	2.28	6.43	2.74
Lack of Skill/Ability	8.51	3.72	9.51	4.01	10.11	3.92	10.32	4.15
Health/Fitness	9.77	3.54	9.60	3.22	10.10	3.36	10.85	3.69

Figure 6.19
Differences between Constraint Factors (Mean Scores) for ES and
IS Male and Female combined Sample



A 2-Way ES and IS samples by Sex (Male & Female) MANOVA was conducted entering the males and females in both England and Iran, then constraints factors. The results revealed a significant difference in multivariate interaction between the two independent variables for the dependent variables [Wilks' lambda=0.72, $F(9,1089)=46.54$, $p<.001$].

To investigate the impact of each main effect on the individual dependent variables, a Roy-Bargmann stepdown analysis was performed on the prioritised dependent variables. All dependent variables were judged to be sufficiently reliable to a warrant stepdown analysis. In a stepdown analysis, all dependent variables are treated as covariates, with the highest priority dependent variables tested in a univariate ANOVA. Homogeneity of regression was achieved for all components in the stepdown analysis. The results of this analysis are summarised in Table 6.37.

In the univariate follow-up F-test significant differences were found for males & females (ES & IS) samples in the factors of lack of time [$F(1,1097)=32.284, p<.001$], lack of interest [$F(1,1097)=5.583, p=.018$], lack of money [$F(1,1097)=64.410, p<.001$], transportation [$F(1,1097)=260.999, p<.001$], lack of facilities [$F(1,1097)=157.857, p<.001$], social factors (lack of partner) [$F(1,1097)=98.921, p<.001$], unawareness [$F(1,1097)=44.510, p<.001$], lack of skill/ability [$F(1,1097)=25.221, p<.001$], and health/fitness $F(1,1097)=14.895, p<.001$] (see Table 6.37).

Table 6-37

MANOVA Tests of Country (1,2) by Sex (Male and Female), and their Inter-relation						
Factors	Univariate F	df	Sig	Stepdown F	df	Sig
Lack of Time	32.284	1,1097	.000	32.284	1,1097	.000
Lack of Interest	5.583	1,1097	.018	11.691	1,1096	.001
Lack of Money	64.410	1,1097	.000	76.755	1,1095	.000
Transportation	260.999	1,1097	.000	197.281	1,1094	.000
Lack of Facilities	157.857	1,1097	.000	39.968	1,1093	.000
Social (lack of partner)	98.921	1,1097	.000	16.876	1,1092	.000
Unawareness	44.510	1,1097	.000	.254	1,1091	.614
Lack of Skill/Ability	25.221	1,1097	.020	.754	1,1090	.385
Health/Fitness	14.895	1,1097	.000	.137	1,1089	.711

A 2-Way Country (1,2) by Sex (Male) MANOVA was conducted entering the males in both England and Iran, then the constraint factors. The results showed a significant multivariate

interaction between the two independent variables for the dependent variables [Wilks' $\lambda=0.76$, $F(9,523)=18.01$, $p<.001$].

To investigate the impact of each main effect on the individual dependent variables, a Roy-Bargmann stepdown analysis was performed on the prioritised dependent variables. All dependent variables were judged to be sufficiently reliable to warrant stepdown analysis. In a stepdown analysis all dependent variables are treated as covariates, with the highest priority dependent variables tested in a univariate ANOVA. Homogeneity of regression was achieved for all components of the stepdown analysis. The results of this analysis are summarised in Table 6.38.

A unique contribution to predicting differences between ES and IS males was made on the lack of money scale, stepdown $F(1,529)=59.635$, $p<.001$. The lack of money scale was scored inversely, the IS males scores showing a greater level of constraint (mean=10.15) than the ES males (mean=7.99). After the pattern of differences measured by the lack of money scale was entered, a difference was also found on the transportation scale, stepdown $F(1,528)=45.435$, $p<.001$. The IS scores showed a greater level of constraint (mean=7.30) than the ES ones (mean=5.16). On the lack of facilities scale, a difference was also found, stepdown $F(1,527)=17.009$, $p<.001$, with the IS scores again showing a greater level of constraint (mean=7.72) than the ES ones (mean=6.02). On the lack of skill/ability scale, a difference was found, stepdown $F(1,524)=14.372$, $p<.001$. Once again the IS scores showed a greater level of constraint (mean=10.11) than the ES ones (mean=8.51).

In the univariate follow-up F-test, the significant main effects found between the ES males and IS male samples were revealed as lack of money [$F(1,531)=57.03$, $p<.001$], transportation [$F(1,531)=88.73$, $p<.001$], lack of facilities [$F(1,531)=65.76$, $p<.001$],

social (lack of partner) [$F(1,531)=25.16$, $p<.001$], and lack of skill/ability [$F(1,531)=23.10$, $p<.001$]. However, no significant differences were found for constraints such as lack of time [$F(1,531)=.037$, $p=.847$], lack of interest [$F(1,531)=.088$, $p=.766$], unawareness [$F(1,531)=1.248$, $p=.264$], and health/fitness $F(1,531)=1.266$, $p=.261$] (see Table 6.38).

Table 6-38

MANOVA Tests of Country (1,2) by Sex (Male), and their Inter-relation						
Factors	Univariate F	df	Sig	Stepdown F	df	Sig
Lack of Time	.037	1,531	.847	.037	1,531	.847
Lack of Interest	.088	1,531	.766	.128	1,530	.720
Lack of Money	57.030	1,531	.000	59.635	1,529	.000
Transportation	88.737	1,531	.000	45.435	1,528	.000
Lack of Facilities	65.766	1,531	.000	17.009	1,527	.000
Social (lack of partner)	25.162	1,531	.000	3.208	1,526	.074
Unawareness	1.248	1,531	.264	5.791	1,525	.016
Lack of Skill/Ability	23.100	1,531	.000	14.372	1,524	.000
Health/Fitness	1.266	1,531	.261	2.315	1,523	.129

A 2-Way Country (1,2) by Sex (Female) MANOVA was conducted, entering the females in both England and Iran, then constraints factors. The results showed a significant multivariate interaction between the two independent variables for the dependent variables [Wilks' lambda=0.60, $F(9,556)=40.64$, $p<.001$].

To investigate the impact of each main effect on the individual dependent variables, a Roy-Bargmann stepdown analysis was performed on the prioritised dependent variables. All dependent variables were judged to be sufficiently reliable to warrant a stepdown analysis. In a stepdown analysis, all dependent variables are treated as covariates, with the highest priority dependent variables tested in a univariate ANOVA. Homogeneity of regression was achieved for all components of the stepdown analysis. The results of this analysis are summarised in Table 6.39.

A unique contribution to predicting differences between ES and IS females was made on the Transportation Scale, stepdown $F(1,561)=158.832$, $p<.001$. The Transportation Scale was scored inversely, the scores for IS females showing a greater level of constraints (mean=7.95) than those for ES females (mean=4.89). After the pattern of differences measured by the Transportation Scale was entered, a difference was also found on the Lack of Time Scale, stepdown $F(1,564)=62.858$, $p<.001$. The IS scores showed lower constraint level (mean=8.42) than the ES ones (mean=10.14). On the Lack of Facilities Scale, a difference was also found, stepdown $F(1,560)=22.232$, $p<.001$, with the IS scores again showing a greater level of constraints (mean=7.98) than the ES ones (mean=5.90). On the Lack of money Scale, a difference was found, stepdown $F(1,562)=21.132$, $p<.001$, with the IS scores once again showing a greater level of constraints (mean=9.85) than the ES ones (mean=8.69). On the Social (lack of partner) Scale, a difference was found, stepdown $F(1,559)=14.977$, $p<.001$. The IS scores again showed a higher level of constraints (mean=11.96) than the ES ones (mean=9.18). On the Lack Interest Scale, a difference was found, stepdown $F(1,563)=14.543$, $p<.001$, with the IS scores once more showing a higher level of constraints (mean=7.49) than the ES (mean=6.80).

The univariate follow-up F-test of the most significant differences found between females ES and female IS samples were in the factors of lack of time [$F(1,564)=62.858, p<.001$], lack of interest [$F(1,564)=7.847, p=.005$], lack of money [$F(1,564)=15.531, p<.001$], transportation [$F(1,564)=177.855, p<.001$], lack of facilities [$F(1,564)=91.780, p<.001$], social (lack of partner) [$F(1,564)=78.310, p<.001$], unawareness [$F(1,564)=64.278, p<.001$], lack of skill/ability [$F(1,564)=5.420, p=.020$], and health/fitness $F(1,564)=17.795, p<.001$] (see Table 6.39).

Table 6-39

MANOVA Tests of Country (1,2) by Sex (Female), and their Inter-relation						
Factors	Univariate F	df	Sig	Stepdown F	df	Sig
Lack of Time	62.858	1,564	.000	62.858	1,564	.000
Lack of Interest	7.847	1,564	.005	14.543	1,563	.000
Lack of Money	15.531	1,564	.000	21.132	1,562	.000
Transportation	177.855	1,564	.000	158.832	1,561	.000
Lack of Facilities	91.780	1,564	.000	22.232	1,560	.000
Social (lack of partner)	78.310	1,564	.000	14.977	1,559	.000
Unawareness	64.278	1,564	.000	3.445	1,558	.064
Lack of Skill/Ability	5.420	1,564	.020	5.884	1,557	.016
Health/Fitness	17.795	1,564	.000	3.449	1,556	.064

6.12.1 Two-Way ANOVA for Both Participants and Non-participants And ES and IS samples

The mean scores of the two ES and IS sample groups (participants and non-participants), in the nine constraint factors were calculated, and the significance of the differences were evaluated by using a 2-way ANOVA test (SPSSx). The results for both ES samples and IS samples in the sub-scales shown respectively in table 6.41, and table 6.44 indicated that there were no significant differences in the constraints found as between participants and non- participants.

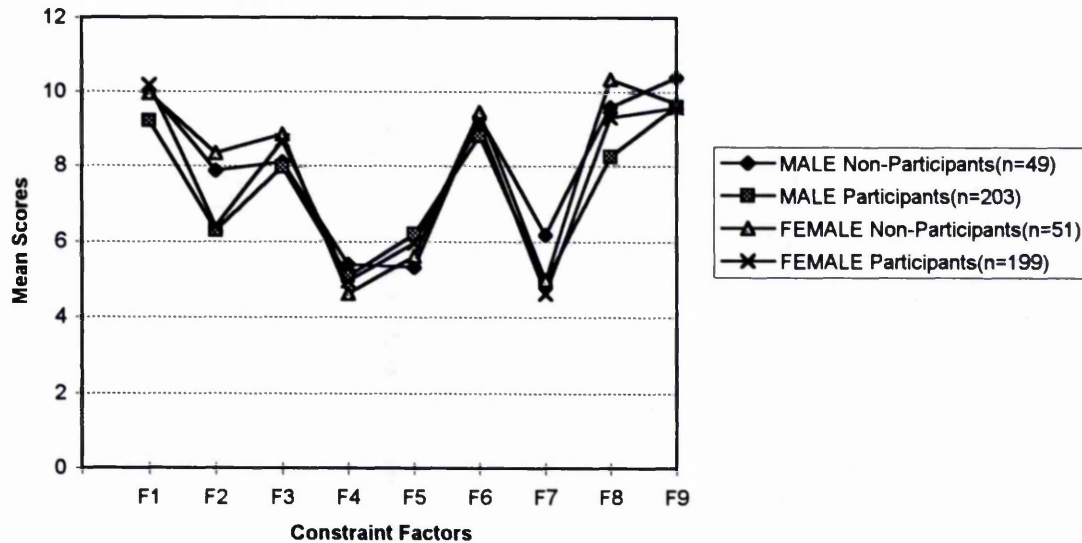
A 2-way Country (England) by (male and female) as Sex (2 by 2) MANOVA was conducted in order to examine whether any differences in constraints on the participation recreational sporting activities of ES and IS samples could be attributed to their country or sex or to an interaction between the two. The samples' scores on each of the sub-scales of the nine factors (time, interest, money, transportation, facilities, social factors (lack of partner), awareness, skill/ability, health/fitness) as dependent variables and country (England) and sex (male and female) as independent variables, in both male and female non/participant groups represented a higher level of constraints than in the participants' one (see Table 6.40 and Figure 6.20). The MANOVA was utilised for the analysis for the adjustment for non-orthogonality.

Table 6-40

**2-Way ANOVA of Constraint factors (Mean Scores and Standard Deviation)
participants and non-participants for ES male and ES female sample**

	MALE				FEMALE			
	Non-Participants (n=49)		Participants (n=203)		Non-Participants (n=51)		Participants (n=199)	
Factors	m	sd	m	sd	m	sd	m	sd
Lack of Time	10.02	2.84	9.20	2.63	9.96	2.40	10.18	2.67
Lack of Interest	7.87	2.67	6.29	2.79	8.33	2.45	6.41	2.45
Lack of Money	8.10	3.53	7.96	3.24	8.84	3.32	8.65	3.22
Transportation	5.40	2.41	5.10	2.36	4.64	1.91	4.96	2.29
Lack of Facilities	5.32	2.50	6.19	2.41	5.62	2.24	5.97	2.48
Social (lack of partner)	9.32	3.11	8.79	3.52	9.45	3.58	9.11	3.33
Unawareness	6.18	2.60	4.95	2.36	5.00	2.36	4.63	2.22
Lack of Skill/Ability	9.59	4.20	8.25	3.56	10.35	4.56	9.30	3.85
Health/Fitness	10.40	3.58	9.61	3.52	9.70	3.15	9.57	3.25

Figure 6.20
Differences between Constraint Factors by Participants and Non-Participants for ES Male and Female Sample



A 2-Way ES samples by Sex (Male & Female) MANOVA was conducted entering males and female in England, then the constraints factors. The results failed to reveal a significant multivariate interaction between the two independent variables for the dependent variables [Wilks' lambda=0.97, $F(9,490)=1.29$, $p=.235$].

To investigate the impact of each main effect on the individual dependent variables, a Roy-Bargmann stepdown analysis was performed on the prioritised dependent variables. All dependent variables were judged to be sufficiently reliable to warrant stepdown analysis. In a stepdown analysis, all dependent variables were treated as covariates, with the highest priority dependent variables tested in a univariate ANOVA. Homogeneity of regression was achieved for all components of the stepdown analysis. The results of this analysis are summarised in Table 6.41.

The univariate follow-up F-test found no significant differences for ES male and females samples in the factors of lack of time [$F(1,498)=3.101$, $p=.079$], lack of interest [$F(1,498)=.317$, $p=.573$], lack of money [$F(1,498)=.005$, $p=.942$], transportation [$F(1,498)=1.421$, $p=.234$], lack of facilities [$F(1,498)=.942$, $p=.332$], social (lack of partner) [$F(1,498)=.067$, $p=.796$], unawareness [$F(1,498)=2.783$, $p=.096$], lack of skill/ability [$F(1,498)=.112$, $p=.737$], and health/fitness $F(1,498)=.768$, $p=.381$] (see Table 6.41).

Table 6-41

MANOVA Tests of ES samples Non-Participants and Participants by Sex (Male and Female), and their interactions						
Factors	Univariate F	df	Sig	Stepdown F	df	Sig
Lack of Time	3.101	1,498	.079	3.101	1,498	.079
Lack of Interest	.317	1,498	.573	1.096	1,497	.296
Lack of Money	.005	1,498	.942	.067	1,496	.795
Transportation	1.421	1,498	.234	1.313	1,495	.252
Lack of Facilities	.942	1,498	.332	2.435	1,494	.119
Social (lack of partner)	.067	1,498	.796	.052	1,493	.819
Unawareness	2.783	1,498	.096	2.935	1,492	.087
Lack of Skill/Ability	.112	1,498	.737	.010	1,491	.917
Health/Fitness	.768	1,498	.386	.671	1,490	.413

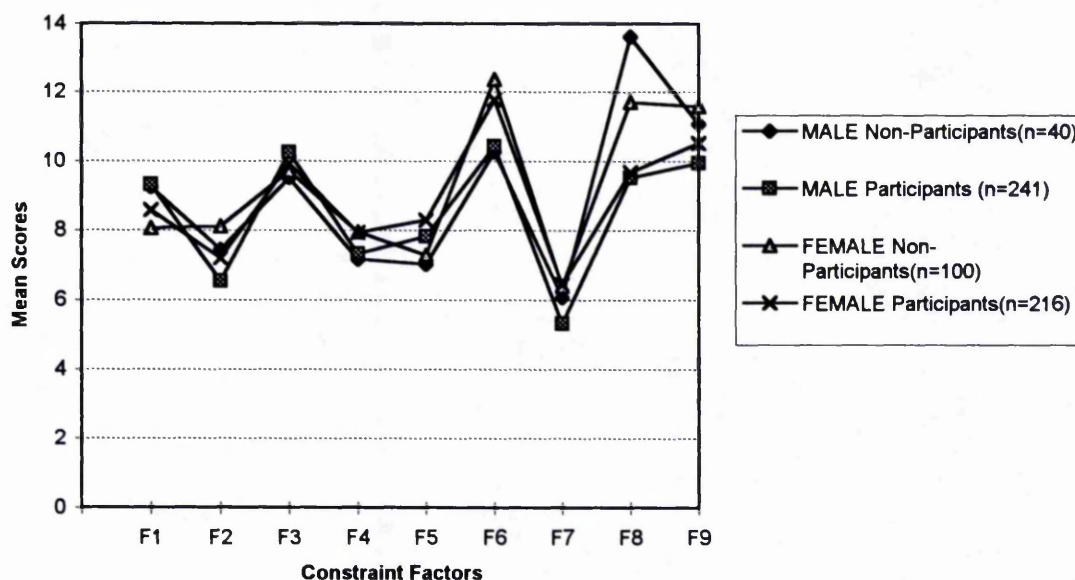
A 2-way Country (Iran) by (male & female) as Sex (2 by 2) MANOVA was conducted in order to examine whether any differences in particular samples' constraints on participation in recreational sporting activities could be attributed to their country or their sex or to an interaction between the two. The samples' scores on each of the sub-scales of the nine factors (time, interest, money, transportation, facilities, social factors (lack of partner), awareness, skill/ability, health/fitness) as dependent variables and country (Iran) and sex (male and female) were analysed as independent variables (see Table 6.42 and figure 6.21). The MANOVA was utilised for the analysis with the adjustment for non-orthogonality.

Table 6-42

**2-Way ANOVA of Constraint factors (Mean Scores and Standard Deviation)
participants and non-participants for IS male and IS female sample**

Factors	MALE				FEMALE			
	Non-Participants (n=40)		Participants (n=241)		Non-Participants (n=100)		Participants (n=216)	
	m	sd	m	sd	m	sd	m	sd
Lack of Time	9.25	2.79	9.32	2.57	8.06	2.27	8.58	2.60
Lack of Interest	7.45	3.01	6.54	2.48	8.12	3.66	7.20	2.83
Lack of Money	9.52	3.48	10.25	3.26	9.71	3.75	9.92	3.65
Transportation	7.17	3.21	7.32	2.75	7.96	3.07	7.94	3.02
Lack of Facilities	7.02	2.77	7.83	2.27	7.28	2.84	8.30	2.52
Social (lack of partner)	10.27	3.22	10.42	3.51	12.36	3.79	11.78	4.03
Unawareness	6.07	2.78	5.31	2.17	6.39	2.90	6.45	2.68
Lack of Skill/Ability	13.62	4.64	9.52	3.47	11.71	4.53	9.68	3.80
Health/Fitness	11.07	3.54	9.94	3.31	11.58	4.04	10.51	3.47

Figure 6.21
Differences between Constraint Factors by Participants and Non-
Participants for IS Male and IS Female Sample



A 2-Way IS samples by Sex (Male & Female) MANOVA was conducted entering males and females in Iran, then constraints factors. The results failed to reveal a significant multivariate interaction between the two independent variables for the dependent variables [Wilks' lambda=0.97, $F(9,585)=1.67$, $p=.093$].

To investigate the impact of each main effect on the individual dependent variables, a Roy-Bargmann stepdown analysis was performed on the prioritised dependent variables. All dependent variables were judged to be sufficiently reliable to warrant a stepdown analysis. In a stepdown analysis, all dependent variables are treated as covariates, with the highest priority dependent variables tested in a univariate ANOVA. Homogeneity of regression was achieved for all components of the stepdown analysis. The results of this analysis are summarised in Table 6.43.

The univariate follow-up F-test showed no significant differences between for ES males and females samples in the factors of lack of time [$F(1,593)=.709$, $p=.400$], lack of interest [$F(1,593)=.000$, $p=.999$], lack of money [$F(1,593)=.494$, $p=.482$], transportation [$F(1,593)=.074$, $p=.784$], lack of facilities [$F(1,593)=.171$, $p=.679$], social factors (lack of partner) [$F(1,593)=.849$, $p=.357$], unawareness [$F(1,593)=2.457$, $p=.117$], lack of skill/ability [$F(1,593)=6.516$, $p=.011$], and health/fitness $F(1,593)=.007$, $p=.932$] (see Table 6.43).

Table 6-43

MANOVA Tests of IS samples Non-Participants and Participants by Sex (Male &Female), and their Inter-relation						
Factors	Univariate F	df	Sig	Stepdown F	df	Sig
Lack of Time	.709	1,593	.400	.709	1,593	.400
Lack of Interest	.000	1,593	.999	.019	1,592	.888
Lack of Money	.494	1,593	.452	.708	1,591	.400
Transportation	.074	1,593	.784	.001	1,590	.975
Lack of Facilities	.171	1,593	.679	.361	1,589	.548
Social (lack of partner)	.849	1,593	.357	1.163	1,588	.281
Unawareness	2.458	1,593	.117	3.678	1,587	.056
Lack of Skill/Ability	6.516	1,593	.011	7.751	1,586	.006
Health/Fitness	.007	1,593	.932	.573	1,585	.449

6.13 Summary

In summary, in the 2-way ANOVAs, the results regarding the relationship between perception of constraints and participation in sports indicated that:

- For the ES male and female combined sample and the IS combined male and female sample, significant differences were found in all constraints dimension factors, namely lack of time, lack of interest, lack of money, lack of facilities, transportation, social factors (lack of partner), lack of skill/ability, unawareness, and health/fitness.
- For the ES male sample and the IS male sample, significant differences were found in five constraints dimensions factors, namely lack of money, transportation, lack of facilities, social factors (lack of partner), and lack of skill/ability. There were no significant differences were found between four of the factors which named lack of time, lack of interest, unawareness, and health/fitness.
- For the ES female sample and the IS female sample, significant differences were found in all constraints dimensions, namely lack of time, lack of interest, lack of money, lack of facilities, transportation, social factors (lack of partner), lack of skill/ability, unawareness, and health/fitness.
- For the ES male sample and the ES female sample, no significant differences were found in all nine constraints dimensions factors, namely lack of time, lack of interest, lack of money, lack of facilities, transportation, social factors (lack of partner), lack of skill/ability, unawareness, and health/fitness.
- For the IS male sample and the IS female sample, also no significant differences were found in all nine constraints dimensions factors, namely lack of time, lack of interest, lack of money, lack of facilities, transportation, social factors (lack of partner), lack of skill/ability, unawareness, and health/fitness.

CHAPTER SEVEN

DISCUSSION

7. Discussion

The purpose of this study was to conduct a comparative investigation into leisure constraints based on a model identifying intra-personal, interpersonal, and structural constraints. The study examined leisure constraints in England and Iran; countries which are widely different with respect to culture, religion, political-ideology, ecology, and economy, to reveal the similarities and differences. The research was focused on a sample of students of two Universities, Manchester and Esfahan.

The most fundamental similarity was in the factor structure of the constraints scale. It was shown that the factor structure is identical with similar individual item loadings on each factor and the same order of importance in relation to the percentage of variance as explained (see tables 3, 4, 5, 6, 7, 8.section 6). This result is a little surprising, particularly considering the cultural differences, but it may relate to the fact that both samples were composed of university students who may be regarded as being in a special situation, in so far as they are educated (university students) and young (aged from 18 to 25). Therefore, it is not known whether this factor structure would apply to the general population in both countries. Although it is sometimes difficult to compare directly results from one study to another, because of differences in methodology, the factors classified in this study have been

found in other studies in North America, for example, Jackson (1993), and also in Greece, for example Alexandris and Carroll (1997a). This would suggest that there is a possibility of a universal applicability and crossing of cultural divisions.

7.1 Constraints on Recreational Sport Participation

As noted in the literature review, the constraint factors have previously been categorised further into intra-personal, interpersonal and structural. This categorisation was found to be appropriate in this study also. In terms of the relative importance of constraints, with respect to mean scores, there is some similarity in the perception of constraints factors in relation to the three broad categories, with "structural" the most important, and "interpersonal" and "intra-personal" being less so in each sample. For the ES male and female combined samples, the structural factors of "Money", "Facilities", and "Time" were found to be the most important constraints on recreational sport participation. "Social" (lack of partner) constraints, as interpersonal constraints were less important constraints, and "Health/Fitness", "Awareness", and "Interest" constraints, as intra-personal, were reported as the least important constraints on recreational sport participation. The IS male and female combined sample identified the factors of "Facilities", "Transportation", and "Money" as the most important constraints on recreational sport participation. Further, "Social" factors (lack of partner) as an interpersonal constraint was less important, and "Health/Fitness", "Awareness", and all "Interest", intra-personal constraints were found to be the least important of all constraints. This analysis clearly showed similar constraints on both ES and IS samples with respect to the three categories (Structural, Interpersonal, and Intra-personal constraints), as reasons for ceasing participation and as barriers to participation in sporting activities, although individual factors were in a slightly different order. However, it should be noted that the Iranian (male

and female) students scored consistently higher in all factors except time (see table 6.13), which implies they were considerably more constrained in all the remaining factors.

As mentioned before (see chapters 3 and 4), England had more facilities / services and diversity of leisure and recreational sporting activities than Iran, which might mean that individuals had no time to participate in as many activities as they would have liked to. In contrast, the Iranian students, because of the lack of facilities and limitations in the diversity of the leisure and recreational sporting activities, might have more time to participate in the fewer leisure and recreational sporting activities which are provided for them. However, the availability of free time is a personal construct which, according to Boothby, Tungatt and Townsend (1981) involves self-designed priorities with assessment of their relative worth. Hence, time related constraints might sometimes be relative (perceived) and not real constraints. Coalter (1993) argued that the reporting of time related constraints might indicate that participation in sport is not a high priority. The other eight factors, lack of interest, lack of money, transportation problems, lack of facilities, lack of partner, unawareness, lack of skill/ability and health/fitness were found to be more constraining for Iranian samples than English ones. As can be seen in chapters 3 and 4, there are differences between culture, religion, political-ideology, ecological and economics, which have affected the results of these constraint factors. Religion (see sections 3.1.6, and 4.1.4) can influence leisure constraint factors, particularly gender issues. As mentioned before (see chapters 3 and 4), the main religion in Iran is Islam and the main religion in England is Christianity. In Iran, not only boys and girls separated in all leisure and recreational sporting activities but they are also separated in primary and secondary schools. In addition, because of the religion (Islam), there is a limitation on outdoor activities for females. For instance, with respect to the lack of facilities in Iran, this issue might have more affect on them than in England. In contrast, in England, in the vast majority of leisure and recreational sporting

activities, both males and females are free to participate together in their desired activities, both indoor and outdoor.

The social dimension of recreational sport participation was shown by individuals' responses to be an important one. Participation in recreational sports was perceived, by a significant number of individuals, as a chance to socialise, meet friends and make new ones. This is particularly the case among the university students. The organisation of social meetings (e.g., at the end of the seasons) and social events for the sport participants could help towards the fulfilment of the "social" needs. On the other hand, the formation of new voluntary sport clubs could help towards this direction. The organisation of social events is one of the services that voluntary sport clubs usually offer to their members.

Unfortunately, the contribution of the voluntary sector to the provision of sporting opportunities in the area of the investigation (Esfahan university) is very limited.

Economics is one the most important issues in the human's life style, which can affect leisure and recreational sporting activities as well. As discussed before (see sections 3.1.2 and 4.1.1), there are differences between the economies of Iran and England, which could affect facilities / services, transportation and so on. The high score in the facilities / services and transportation dimension relates to a very important issue in the administration of Iranian sports. It has been argued before that the promotion of mass participation has been widely neglected by the central government in Iran. The results of the present study provided support for this argument. The majority of the respondents reported that the sport facilities and transportation in the area of the investigation are poor and inadequate, and the range of the sport services provided is limited. The university of Esfahan is an autonomous organisation with limited financial resources. It is responsible for managing the outdoor and indoor sport facilities in the university, which are mainly football, volleyball, basketball courts. Furthermore, it organises local leagues in football, volleyball, basketball, wrestling, badminton, table tennis for the students in the university. These programmes, according to

the Sport Development Officer, were shown to be very popular and indicated that individuals are really interested in participation in sport. The General Secretariat of Sport manages indoor and outdoor sports facilities, most of which are not available to the public, and are used only by the students.

It is thus clear that the opportunities for participation in sport are very limited. There is an absolute lack of outdoor public leisure centres (available for females) and organised sport services / services provided by the public and private sectors because of the political-ideology in Iran.

For the ES male sample, structural constraints "Facilities", "Money", and "Time" were found to be the most important constraints on participation in recreational sporting activities. The interpersonal constraints "Social factors" (lack of partner) was less important, and the intra-personal constraints. "Health/Fitness", "Interest", and "Skill/Abilities", were reported as the least important constraints on participation in recreational sporting activities.

The IS male sample showed "Facilities", "Money", and "Transportation" to be the most important constraints on recreational sport participation. The interpersonal "Social"(lack of partner) constraint was less important, and the intra-personal constraints lack of "Interest", "Health/Fitness, and "Awareness" were found to be the weakest constraints. These results clearly show similar constraints on both ES and IS samples with respect to the three categories (Structural, Interpersonal, and Intra-personal constraints), although individual factors were in a slightly different order. However, it should be noted that the Iranian Male students scored consistently higher in all the factors except time (see table 6.14), which implies they were considerably more constrained in all the remaining factors.

For the ES female sample, the structural factors of "Money", "Time", and "Facilities" were found to be the most important constraints on recreational sport participation. The interpersonal "Social" factors (lack of partner) was a less important constraint, and the intra-personal factors of "Awareness", "Health/Fitness", and "Interest" were reported as the weakest constraints.

For the IS female sample, the factors of "Facilities", "Transportation", and "Money" were identified as the most important constraints on recreational sport participation. The interpersonal "Social" factors (lack of partner) was a less important constraint, and the intra-personal factors of lack of "Interest", "Health/Fitness", and "Awareness" were found as the weakest constraints. This analysis clearly showed similar constraints on both ES and IS female samples with respect to the three categories of Structural, Interpersonal, and Intra-personal constraints, although individual factors were in a slightly different order. However, it should be noted that the Iranian female students scored consistently higher in all the factors except time (see table 6.15), which implies they were considerably more constrained in all the remaining factors.

It should be noted that only the factor of "Time" in ES samples was scored higher than in the IS samples, which may be the result of the diversity of recreational sporting activities, and also of the availability of certain leisure activities (e.g., bars, discotheques, bingo, and so on), which are strictly prohibited in Iran because of religion (Islam) and politics (Islamic government). The high score in the time dimension was, to a degree, expected.

Work/studies, family, domestic and social commitments always contribute towards limited availability of free time.

The result of the present study supports the investigations carried out in the U.S.A. Canada, and England. The majority of the investigations conducted in these countries including Coalter (1993) in England and Jackson (1993) in Canada, reported time-related constraints

to be the most broadly perceived ones. According to Boothby et al. (1981), time-related constraints might sometimes be relative (perceived) and not real constraints. The scheduling of available free time might also be a significant factor. This is supported by the respondents' high score in the individual constraint of "the timetable does not fit with mine".

According to Godbey (1985) time-related constraints are among those which the organisation has little potential to act upon. Nevertheless, timetable-related problems are among the constraints which sport organisations might be able to handle. Provision of flexible scheduling for the organised meetings might help towards the lessening of these constraints. For instance, meetings can be designed outside of working hours (e.g., in the afternoon, evening, or at weekends). Torkildsen (1994c) suggested that programming times should meet the customer needs, rather than those of the organisation and staff.

Godbey (1985) also suggested that, in order to remove time-related constraints, extensive co-operation between managers, providers and authorities is required. This may be an effective suggestion, as it might also contribute to creating an active lifestyle. Increasing individuals' motivation and promoting sports practically might be associated with a lower perception of time-related constraints.

The high score in the facilities / services relates to the administration of sport activities both in England and Iran. The sport facilities of both Manchester and Esfahan universities have already been outlined in chapters 3 and 4 with a greater lack of facilities in Iran than in England. The majority of the respondents, both in England and Iran, reported that the sports facilities in the university are poor and inadequate. This was particularly true about Iran, where the range of the sports services is limited. Also, due to religious considerations, sports activities for females are limited to indoor ones.

Financially-related constraints were also reported to a significant degree by both English and Iranian respondents. Gratton & Taylor (1995) suggested that the total cost of participation in sport includes the following components: the admission fee, transportation costs, the cost in terms of time, the costs of participation-related food and drink consumption and equipment hire, membership and subscription fees and the cost of equipment and clothing. Differentiated pricing might be one of the strategies that could be adopted by the management of the organisations in order to reduce the effects of financial constraints. Special prices for specific groups, such as university students, might affect the participation in recreational sporting activities. Although Coalter (1993) noted that entrance fees might not be an absolute constraint on participation / non-participation in sport, he pointed out that it might be a relative barrier which is more likely to affect the frequency of participation. If this argument is correct, it implies that non-participants participation in sport might not always be accompanied by a reduction of the entrance fee.

Transportation was also reported by the majority of the respondents, particularly the Iranian samples. In terms of accessibility constraints, it could be argued that constraints such as "I do not have a car" and "transportation takes time" are out of the control of the manager of an organisation. Nevertheless, it could be argued that these constraints are also related to poor provision or location of sport and recreation. Regarding the situation in the area of the investigation (university), it should be noted that the facilities were located on the university campus. As many researchers, including Hultsman (1992) and Jackson and Rucks (1993), have argued, transportation problems, particularly among young adults, should be taken into account. Some solutions have been suggested, such as centralised activity locations and agency sponsored transportation or established facilities in Student Halls, in order to reduce the impact of transportation as a constraint.

Structural constraints such as, "Money", "Facilities", "Time", and "Transportation", have been found in the majority of previous studies to be the most important constraints on participation in recreational sporting activities. In this connection, for example, Newby and Lilley (1980) mention lack of time and money, Hultsman (1992) and Jackson and Rucks (1993), lack of money and transportation and Schreyer (1986) and Jackson (1993), lack of time, money and facilities.

Socially-related constraints were also reported by both English and Iranian samples. These constraints are experienced interpersonally and are related to the inability to find partners for participation in sport. Although they are specially applicable to team games such as football, volleyball, basketball, and so on, they might also be applicable to individual activities. People (particularly women) are usually reluctant to take part in individual activities, such as walking and jogging, without partner(s). These findings can be considered in relation to the social motives for participation in recreational sporting activities. Searle and Jackson (1984) suggested that providing opportunities in the form of leagues and other events might be one of the ways to lessen partner-related constraints. They also suggested that the provision of opportunities for social interaction should be part of the context of sports activities. The same authors (1985a) suggested that day-care programmes may provide the opportunity for individuals to participate. With reference to the situation in the area of the investigation (the university), it should be noted that the organisation of leagues and events could be extended to include more sports (e.g., individual sports). Also, students have the attitudes of their peer group (e.g., class mates) in the university. Events such as football, volleyball, basketball, running, and so on, could be organised by private sports clubs for specific groups, such as university students and young people and this can help to alleviate these constraints. Voluntary sports clubs are created on the basis that their members have similar interests, and essentially exist to offer services to those members.

Gratton and Taylor (1985) and Haywood et al. (1995) supported the view that a great contribution is made by the voluntary sector to the promotion of mass participation in England. Unfortunately, the contribution of the voluntary sector to the promotion of mass participation in Iran is very limited.

Constraints related to lack of interest were also reported by both English and Iranian respondents. Although the relative importance of these constraints was also shown to be low, the use of more powerful statistical techniques (see section 7.3) indicated that these constraints might be among the most powerful components in the distinction between participation and non-participation in sport. It should be noted that the meaning of “lack of interest” as a reason for non-participation is not always clear. According to Jackson (1990b), the people who are not interested in participation in sport might not be homogeneous. Some of them might have a genuine lack of interest in participation, but some others might be influenced by intra-personal constraints, like negative former experiences, perceived self-competence and perceived fitness levels, which might influence their desire to participate in sports.

According to McGuire and O’Leary (1992) in the U.S.A, and White and Coakley (1986), in England, one of the most significant strategies which can overcome the lack of interest constraint is the provision of leisure education. Mannel and Zuzanek (1991) reported that people who have a repertoire of stable and permanent leisure activity interests (or a lack of interests) also have a repertoire of permanent and stable reasons for non- participation. According to Mitchell and Chandler (1991), an emphasis on the importance of lifetime participation should be among the main objectives of physical education at schools. They argued that, physical education can promote lifetime participation, if physical educators emphasise the longer term aims of their subjects and realise that an instantaneous increase in fitness is an unrealistic objective. They also suggested that the main objective should be to

“teach attitudes, knowledge, and behaviours, which will potentiate the living of a healthy and active lifestyle throughout the dramatically extended life-span” (p279). They further argued that health education and nutritional science might have a critical role to play in the educational process. The objective should always be for the adolescents, particularly the secondary school students, to leave school with a knowledge of what it takes to retain a healthy and active lifestyle, and of how this may be achieved within the community. As Beck and Page (1988) argued, poor physical health can be a major cause of reducing participation in sport.

Health / fitness constraints were also reported by both ES and IS samples. Although the relative importance of these constraints was not shown to be high, more powerful statistical analysis (see section 7.3) provided evidence that these constraints might be among the most significant components distinguishing between participation and non-participation in sport. For instance, individual items such as health condition and perceived fitness can influence participation. To remove these constraints, it is essential to get the individual into a recreational activity context. Jackson and Dunn (1991) pointed out that being physically unable to participate was more frequently identified as a reason for ceasing participation. Skill / abilities constraints were also reported by both ES and IS samples. Although the relative importance of these constraints was shown to be low, more powerful statistical analysis (see section 7.3) provided evidence that these constraints might be among the most significant components distinguishing between participation and non-participation in sport. An examination of the individual items included within this dimension suggests that they relate mainly to the following dimensions: perceived self-skills and perceived self-competence.

Unawareness was also reported by both ES and IS respondents. Although the relative importance of this constraint was shown to be low, more powerful statistical analysis (see section 7.3) provided evidence that this constraint might be among the most significant components distinguishing between participation and non-participation in sport. This constraint might be related to (a) poor marketing and promotion of the sport services by both public and private organisations; (b) respondents' perception of the availability of opportunities and respondents' perception of their skill or fitness levels (intra-personal constraints). With reference to the situation in the area of the investigation (university), it should be noted that students more and less know about the facilities. It could be argued, based on both the researcher's experience and the respondents' scores on the items included within the lack of knowledge, (such as "I do not know what is available" and "I do not know where to participate"), that sport organisations both in Manchester and Esfahan Universities need to work more carefully on issues related to the promotion of their services. A more strategic approach to the planning and delivery of their services should be adopted. This could help them not only to increase the frequency of participation of the current participants (e.g., in new activity), but also to attract new customers (students), by promoting their services more effectively as suggested by Torkildsen (1994b).

The same author, in a series of papers (1994a, 1994b, 1994c) indicated how leisure and recreation organisations can effectively design, assist and deliver their services. The Sports Council (1994a) in England also suggested how public organisation can develop their strategic plan effectively in order to merge in the social objectives of the services (Sport for All). Many investigators in different countries such as Searle and Jackson (1985a) in Canada, Godbey (1985) in North America, and the Sports Council (1994a) in England, supported this argument which has previously been widely expressed in the context of issues related to sport and recreation management.

Unawareness-related constraints might also be associated with respondents' perception of the availability of opportunities and of their skill and fitness levels.

These constraints are classified as intra-personal and are difficult to remove, because they are beyond the control of the organisations. This issue could be approached by examining how these self-perceptions develop. It could be argued, following Armstrong, McManus, Welsman and Kirby (1996), that a low level of physical activity in children, results in a lack of physical fitness and little desire to participate in physical activity.

On the other hand, Papaioannou (1992) and White and Coakley (1986) argued that a poor perception of opportunities in Physical Education can result in dropping out. They noted that there is a relationship between low fitness levels and lack of knowledge and they lead to a lack of interest in participation and a low desire to gain information. As mentioned previously these could be tackled at school level, by including such factors as a mastery orientation and an enjoyable environment (Papaioannou, 1992) which should lead to a consequent increase in activity levels.

Interpersonal constraints such as, "Social isolation" (related to "lack of partner") have been found by several researchers, including Jackson (1993). Intra-personal constraints such as, "Skill/Abilities", "Unawareness", "Health/Fitness", and "Lack of interest", were experienced in the current investigation. "Lack of interest" which had been excluded in many previous studies (Raymore et al., 1993), was found to be of minor importance as a leisure constraint factor for both the ES and IS samples.

The results of the present study indicated that dimensions within the concept of "constraints" on recreational sport participation do exist. In terms of factor structure, the factors of time, money, facilities, and transportation were conceptually the most clear and can be easily compared with those found by previous studies such as Jackson (1993).

In terms of the relative importance of the constraints dimensions, money, facilities, time, and transportation related constraints were shown to be the most widely reported. However, respondents reported a wide range of constraints. This is a feature which will be discussed with reference to the situations both in England and Iran in an effort to make suggestions about their removal.

7.2 The Relationship between Perception of Constraints and Participation / Non-Participation in Recreational Sporting Activities

The relationship between the perception of constraints and participation in sport and leisure activities is among the most debated issues in the leisure constraints research. Kay and Jackson (1991) and Shaw et al. (1991) noted that there is a negative relationship between the perception of constraints and leisure participation, in a study conducted with the specific aim of investigating this issue tending to support the widely accepted assumption to this effect. The same authors argued that constraints might not always prevent participation in leisure, as they were shown to have a significant relationship with actual leisure participation. The results of the present study showed a wide range of constraints among participation and non-participation groups in both ES and IS samples.

It should be noted that an aggregated analysis of the data was also employed for participant and non-participant groups for both ES and IS samples in the present study with the aim of empirically investigating the hierarchical model of leisure constraints proposed by Crawford et al. (1991), which has had little empirical support so far.

Findings for both participant and non-participant groups in the ES male and female combined sample indicated that while non-participants scored higher in all the constraint

dimensions (other than access to facilities), significant statistical differences were found in four of them: lack of interest ($t=6.02$, $df=500$, $p<.001$), lack of facilities ($t=-2.22$, $df=500$, $p<.05$), unawareness ($t=2.99$, $df=500$, $p<.01$), and lack of skill/ability ($t=2.54$, $df=500$, $p<.05$). These four dimensions were those that were found to contribute significantly towards the perception of participation / non-participation in sport, when a direct discriminatory analysis was performed (see table 6.24).

Findings for both participant and non-participant groups in the ES male sample indicated that while non-participants scored higher in all the constraints dimensions (except access to facilities), significant statistical differences were also found in four of them: lack of interest ($t=3.60$, $df=250$, $p<.001$), lack of facilities ($t=-2.25$, $df=250$, $p<.05$), unawareness ($t=3.21$, $df=250$, $p<.01$), and lack of skill/ability ($t=2.28$, $df=250$, $p<.05$). These four dimensions were those that significantly contributed towards the perception of participation / non-participation in sport, when a direct discriminant analysis was performed (see table 6.25).

Findings for both participant and non-participant groups in the ES female sample indicated that while non-participants scored higher in all the constraints dimensions (except lack of time, transportation and lack of facilities), significant statistical differences were also found in only one of them: lack of interest ($t=4.98$, $df=248$, $p<.001$). This was one of those dimensions that were found to contribute significantly towards the perception of participation / non-participation in sport, when a direct discriminatory analysis was performed (see table 6.26).

Findings for both participant and non-participant groups in the IS male and female combined sample indicated that, while non-participants scored higher in all the constraints dimensions (except three of them: lack of time, lack of money, and lack of facilities), significant statistical differences were also found in six of them: lack of time ($t=-2.36$,

df=596, $p<.05$), lack of interest ($t=3.41$, df=596, $p<.001$), lack of facilities ($t=-3.20$, df=596, $p<.01$), (lack of partner) social ($t=2.02$, df=596, $p<.05$), lack of skill/ability ($t=6.28$, df=596, $p<.001$), and health/fitness ($t=3.38$, df=596, $p<.001$). These six dimensions were those that contributed significantly towards the perception of participation / non-participation in sport, when a direct discriminant analysis was performed (see table 6.27).

Findings for both participant and non-participant groups in the IS male sample indicated that, while non-participants scored higher in all the constraints dimensions (except five of them: lack of time, lack of money, transportation problems, lack of facilities, and social 'lack of partner'), significant statistical differences were also found in four of them: lack of interest ($t=2.08$, df=279, $p<.05$), lack of facilities ($t=-2.02$, df=279, $p<.05$), lack of skill/ability ($t=5.34$, df=279, $p<.001$), and health/fitness ($t=1.98$, df=279, $p<.05$). These four dimensions were those that contributed significantly towards the perception of participation / non-participation in sport, when a direct discriminatory analysis was performed (see table 6.28).

Findings for both participant and non-participant groups in the IS female sample indicated that while non-participants scored higher in all the constraints dimensions (except four of them: lack of time, lack of money, lack of facilities, and unawareness), significant statistical differences were also found in four of them: lack of interest ($t=2.26$, df=315, $p<.05$), lack of facilities ($t=-3.19$, df=315, $p<.01$), lack of skill/ability ($t=3.94$, df=315, $p<.001$), and health/fitness ($t=2.45$, df=315, $p<.05$). These four dimensions were those that contributed significantly towards the perception of participation / non-participation in sport, when a direct discriminatory analysis was performed (see table 6.29).

The present study testing a model with nine constraint factors as the predictors and two groups, participants and non-participants, as the dependent variables, offers a significant contribution towards the prediction of participation in sport. Nevertheless, it suggests that

the model needs further development, if participation in sport is to be more accurately predicted.

As can be seen above, among the male and female combined samples, and the separated male and female samples for both IS and ES, the four dimensions of constraints categorised as intra-personal constraints, namely lack of interest, skill/ability, unawareness, and health/fitness were, the four most powerful predictors of participation in sport, followed by the structural constraints of facilities and time and the interpersonal constraint of social factors (lack of partner). These results suggest that although non-participants reported structural constraints as the most important reasons for their non-participation, the intra-personal constraints might have mainly acted as blocking constraints and might have been the actual reasons for their non-participation. Hence, individuals who experience low levels of intra-personal constraints are more likely to participate in sports than those who experience high levels of intra-personal constraints, irrespective of the structural and interpersonal constraints. These findings, which support many previous investigations including Boothby, et al. (1981), Jackson (1991b), Raymore et al. (1993) and Carroll and Alexandris (1997) have many implications for the delivery and management of sport services, suggesting that if non-participants are to be targeted, intra-personal constraints should be addressed first.

The findings also provide partial support for the previously discussed hierarchical importance model proposed by Crawford et al. (1991), in which constraints levels would range from most proximal (intra-personal) to most distal (structural). They also support their argument that intra-personal constraints might be the most powerful constraints on an individual's decision to take part in recreational sporting activities.

As Coalter (1993) and Gratton and Taylor (1995) argued, although it is difficult to quantify facilities, entrance charges, and time costs as demand functions for multi-purpose leisure

facilities by using conventional economic techniques, it is possible, using market investigation techniques, to appreciate the major effects on demand and specially the influence of changes in entrance prices. They believe that more disaggregated demand information is needed by managers, however, particularly as regards individual activity, facility and type of user. As already discussed, lack of facilities, lack of time, lack of money, and transportation were conceptualised as structural constraints and there is a negative relationship between participation in sport and these dimensions which is an issue worth noting. According to the hierarchical model, they should not be among the most powerful predictors of participation / non-participation in sport. However, the significant negative relationship between both facilities and time and participation in sport might relate to the difficulties in arranging constraints within the intra-personal, interpersonal and structural categories. Facilities and time related constraints have been broadly presumed in the literature as external and consequently structural constraints. Boothby et al (1981a) suggested that time costs are personal constructs, including self-planned preferences with evaluations of their relative worth, need and preferred schedules. Hence, time related constraints might not always be external constraints; but might represent personally perceived constraints.

The hierarchical model of leisure constraints developed by Crawford et al. (1991) suggests that the factors which created constraints might continue to have relevance even after an individual takes up participation in a given activity. They also suggested that constraints might affect subsequent aspects of engagement, like the person's frequency of participation. Jackson et al. (1993), who developed the negotiation proposition supported this argument, contending that constraints are conceived of as phenomena which are more likely to result in modified participation than non-participation. They also suggested that participation which has happened in the absence of constraints is likely to be different from participation resulting from negotiation.

7.3 Demographic Comparisons of the Perception of Constraints between ES and IS samples

The results of the present study support the findings of the studies carried out in America, Canada, England and Greece and indicate the existence of socio-demographic differences in the perception of constraints. These differences will be discussed in relation to the annual participation rates.

Searle and Jackson (1985b) pointed out that the perception of constraints decreased with the increased level of education. With reference to the situation in the area of the investigation (university), it should be noted that this might, to a degree, explain the high participation rate. The factors involved are education, age, which ranged from 18 to 25 (young adults), peer group (partner), and facilities (private facilities provided for students). In this connection, Alexandris and Carroll (1997b) reported that although university students had the highest participation rate, they perceived that were highly constrained.

7.3.1 Similarities

As discussed above, based on the three-way model of constraints (intra-personal, interpersonal, and structural) suggested by Crawford et al. (1991), the ES male and female combined sample, the IS male and female combined sample, the ES male sample, the IS male sample, the ES female and IS female sample showed the same constraints. The most important constraints were structural and included money, facilities, time, and transportation (see chapter 3 and 4). Interpersonal constraints including the social (lack of partner) constraints were less important (see sections 3.2.1 and 4.2.1). Intra-personal constraints were found to be of minor importance for both ES and IS samples (see chapters 3 and 4).

No significant differences were found by the t-test in the four constraints “lack of time”, “lack of interest”, “unawareness”, and “health/fitness” between male ES and male IS samples (see table 6.17). These findings support the argument that the student lifestyle and the increased availability of free time might contribute towards increased participation rates among students (see sections 3.2.1, 3.2.1.1, 3.2.1.2, 3.2.1.3 and 4.2.1, 4.2.1.1, 4.2.1.2).

No significant differences were found by the t-test in the five constraints “lack of interest”, “transportation”, “lack of facilities”, “social (lack of partner)”, and “health/fitness” or in the total constraints scale between male and female ES samples (see table 6.19). In spite of gender differences, the findings show certain aspects of ES students’ lifestyle, such as peer group (partner) and private facilities, are the same (see chapter 3).

No significant differences were found by the t-test in the three constraint factors “lack of money”, “lack of facilities”, and “lack of skill/abilities” between male and female IS samples (see table 6.20). In spite of gender differences, the findings show that factors of students’ lifestyle such as lack of funds and private facilities are the same (see chapter 4).

7.3.2 Differences

Given the comparative nature of this study, the consideration of similarities and differences were obviously central to the treatment of data. As discussed before, some discussion is required about similarity and differences in order to explain how and why these results were produced.

Despite similarities in constraints in participation in recreational sporting activities in relation to the model (structural, interpersonal and intra-personal) constraints, there are different levels of constraints such as, facilities (see sections 3.2.1.2 and 4.2.1.2), economies

(see sections 3.1.2 and 4.1.1) and so on, particularly in terms of gender issues because of religion (see sections 3.1.6 and 4.1.4).

The high score in the financially related factor for the ES male and female combined sample was the highest constraint because, as mentioned before, there is a diversity of leisure activities for both male and female ES samples (see section 3.1.7), and also the admission fees are high for students. At the same time, for the IS male and female combined sample, the highest score was found for the facilities factor. A likely explanation for this is that facilities relates to a very important issue in the administration of Iran. It has been argued (see sections 4.1.5 and 4.2.1.2) that the promotion of mass participation has been neglected by the central government in Iran. In spite of the provision of good sport facilities to the students in the university, it has been reported that the services have not been quite enough to fulfil their needs. The majority of respondents reported that the sports facilities in the area of the investigation are poor and inadequate.

For the ES male sample, structural constraints such as facilities, money and time were found to be the most important constraints on recreational sport participation. As stated before males tended to participate in sport activities more than females (see section 3.1.7), and also they need to have more facilities, money and time for their participation in recreational sporting activities.

For the IS male sample, the same constraints (structural) but with a different priority between facilities, money and transportation were shown to be the most important constraint on recreational sporting activities. Lack of facilities, lack of money and transportation problem for the IS male sample were the major constraints because males tend to participate more than females which means that more money is likely to be spent on recreational sporting activities (see section 4.1.5).

For the ES female sample, constraints factors such as money, time and facilities were found to be the most important constraints on recreational sporting activities. As can be seen in sections 3.1.7 and 3.2.1.2., diversity of leisure activities and admission fee can affect on these constraints.

For the IS female sample, the factors of facilities, transportation and money were identified as the most important constraints on recreational sporting activities. With respect to religion, (see section 4.1.4), there is limited access to outdoor activity for women. There is also a lack of facilities (see section 4.1.5) which also affects the recreational sporting participation of females.

In terms of history, both England and Iran have long histories with their own reputations in literature, art, music and so on. They have different politics and cultures England has a western culture and democratic system and Iran has an eastern culture and Islamic politico-ideological system, and this has had a major effect on people's lifestyles.

The most significant constraint factors differences between the ES male and female combined sample and the IS male and female combined sample scores were found to be as follows:

1. Lack of time ($t=5.70$, $df=1098$, $p<.001$): this constraint was found to be more significant for the ES sample than for the IS sample, although students in both Manchester and Esfahan university are more or less the same (in terms of age, education and population). There are differences in facilities and particularly the diversity of leisure and recreational sporting activities. English students have more access to a diversity of leisure and recreational activities than Iranian students. Also their lifestyles are completely different from each other (see sections 3.1.7, 3.2.1.2, 3.2.1.3, and 4.1.5,

- 4.2.1.2). This constraint was also found to be more significant for the ES female than for the IS female sample.
2. Lack of interest ($t = -2.39$, $df = 1098$, $p < .05$): this constraint was found to be more significant for the IS sample than for the ES sample. There are different ideas about lack of interest, such as the fact that people who are not interested in participation, negative former experience and lack of leisure education. With regard to facilities (see sections 3.2.1.2 and 4.2.1.2), recreational sporting activities background (see sections 3.1.7 and 4.1.5) and money (see sections 3.1.2 and 4.1.1), English samples were more interested in participation than Iranian ones. This constraint was also found to be more significant for the IS female than for the ES female sample.
 3. Lack of money ($t = -8.03$, $df = 1098$, $p < .001$): this constraint was found to be more significant for the IS sample than for the ES sample. As a result of economic differences (see sections 3.1.2 and 4.1.1), there are massive differences in the facilities for leisure, recreation and sporting activities (see sections 3.1.7, 3.2.1.2 and 4.1.5, 4.2.1.2). Also English samples are able to access a diversity of leisure activities, which tend to be much better resourced.
 4. Transportation problems ($t = -16.50$, $df = 1098$, $p < .001$): this constraint was found to be more significant for the IS sample than for the ES sample. The population of England and Iran are more or less the same. Also, Manchester and Esfahan are more or less the same in their own countries in terms of industrialisation, population and situations (see sections 3.1.4 and 4.1.2). However, there are massive differences in transport such as airplanes, trains, buses and taxis and even roads.
 5. Lack of facilities ($t = -12.59$, $df = 1098$, $p < .001$): this constraint was found to be more significant for the IS sample than for the ES sample. As mentioned above, the majority of people do not have access to proper facilities for leisure, recreation and sport in Iran. Lack of facilities were reported significantly for both ES and IS samples. So it is not

- surprising that in this study the Iranian samples had more constraints in this area than the English ones, particularly the females (see sections 3.1.6, 3.1.7, 3.2.1.2 and 4.1.4, 4.1.5, 4.2.1.2).
6. Lack of partner ($t = -10.09$, $df = 1098$, $p < .001$): this constraint was found to be more significant for the IS sample than for the ES sample, mostly because of religion (see sections 3.1.6 and 4.1.4) in which no relationship is allowed between males and females before marriage. Lack of interest may relate to the social motives for participation in recreational sporting activities. Searle and Jackson (1984) suggested that providing opportunities in the form of leagues and other events might be one of the ways to lessen partner-related constraints.
 7. Lack of awareness ($t = -6.69$, $df = 1098$, $p < .001$): this constraint was found to be more significant for the IS sample than for the ES sample. As mentioned before, with reference to the situation in the area of the investigation (university), it should be noted that students are more or less aware of the existence of the facilities (see sections 3.2.1.2 and 4.2.1.2). It could be argued, based on both the researcher's experience and the respondents' scores on the items included within the lack of knowledge, (such as "I do not know what is available" and "I do not know where to participate"), that sport organisation, particularly in Esfahan university should work more carefully on issues related to the promotion of their services. This constraint was also found to be significant for the IS female than for the ES female sample.
 8. Lack of skill / ability ($t = -5.04$, $df = 1098$, $p < .001$): this constraint was generally found to be significant though it was found to be more significant for the IS sample than for the ES sample, reflecting differing recreational sporting activities background (see sections 3.1.7 and 4.1.5), politics (see sections 3.1 and 4.1) and particularly gender issues, and religion (see sections 3.1.6 and 4.1.4).
 9. Health / fitness ($t = -3.88$, $df = 1098$, $p < .001$): this constraint was found to be more

significant for the IS sample than for the ES sample. Although this constraint was not shown to be high, it might be among the most significant components of participation / non-participation in sport. For example, individual items such as health condition and perceived fitness can influence participation. To remove these constraints, it is essential to get the individual into a recreational sporting activities context. Recently levels of participation in leisure and recreational activities in Iran have been increasing because: 1) since the revolution, the population has nearly doubled, which means nearly half of the population are young (under 20 years of age). 2) because of the government, which is Islamic, all discotheques, casino, bingo and so on are closed (see section 4.1.4) and the government encourages the people to take part in recreational sporting activities. This constraint also was found to be more significant for the IS female than for the ES female sample.

The most significant constraint factor differences between the ES male sample and ES female sample scores were as follows:

- A) Lack of time ($t = -3.28$, $df = 500$, $p < .001$): this constraint was found to be more significant for the ES female sample than the ES male sample. According to Church (1997) boys tend to participate in more sports outside of lessons than girls and they also spend more time on sports than girls. Males tend to participate in a wider range of sports than females and were especially likely to take part in team games (see section 3.1.7).
- B) Lack of money ($t = -2.40$, $df = 500$, $p < .05$): this constraint was found to be more significant for the ES female than for the ES male sample, because of the diversity of leisure activities (see section 3.2.1.2) and club competitions (see section 3.2.1.3). In addition the fact that the males are not as interested as girls in study (see section 3.1.8) can make this constraint more important for males than for females.

C) Lack of awareness ($t= 2.27$, $df=500$, $p<.05$): this constraint was found to be more significant for the ES male for than ES female sample. As mentioned before, this constraint with reference to the situation in the area of the investigation (university), it should be noted that students are more or less aware of the existence of the facilities (see sections 3.2.1.2 and 3.2.1.3). It could be argued, based on both the researcher's experience and the respondents' scores on the items included within the lack of knowledge, (such as "I do not know what is available" and "I do not know where to participate"), that sport organisations, should work more carefully on issues related to the promotion of their services particularly for female students.

D) Lack of skill / ability ($t= -2.90$, $df=500$, $p<.01$): this constraint was found to be more significant for the ES female for than ES male sample. An examination of the individual items included within this dimension suggests that they relate mainly to the following dimensions: perceived self-skills and perceived self-competence (see section 3.1.7).

The most significant constraint factor differences between the IS male sample and the IS female sample scores were as follows:

A) Lack of time ($t= 4.30$, $df=596$, $p<.001$): this constraint was found to be more significant for the IS male than for the IS female sample. Boys tended to participate in more sports than girls and they also spent more time on sports than girls. The girls were more limited in terms of the range of sporting activities particularly outdoor because their religion (see section 4.1.4).

B) Lack of interest ($t= -3.57$, $df=596$, $p<.001$): this constraint was found to be more significant for the IS female than for the IS male sample. Former experience of recreational sporting activities (see section 4.1.5), lack of interest in taking part in sport in terms of politics (see section 4.1), limitation of participation because of religion may be reasons (see section 4.1.4). Furthermore, lack of facilities / services (see section

4.2.1.2) might be affected by lack of interest for the IS female sample.

- C) Transportation problems ($t = -2.65$, $df = 596$, $p < .01$): this constraint was found to be more significant for the IS female sample than for the IS male sample. However, transportation problems found one of the most important constraints for both the IS male sample and the IS female sample. The IS female sample still showed they had more constraints than the males. One of the most important reasons is that the girls are strictly controlled by their family such as their parents and brothers in relation to their culture and religion (see section 4.1.4), so they are not allowed to take part in recreational activities outside of the lessons.
- D) Lack of partner ($t = -5.21$, $df = 596$, $p < .001$): this constraint was found to be more significant for the IS female than for the IS male sample. As mentioned before, there are no opportunities for female and even male to have a partner of the opposite sex before marriage. This separation is also reflected in the field of leisure and sport. Females should exercise indoor unless covered and should not be seen by males. Females in Iran are not allowed to go uncovered in public, but they are allowed to participate in social activities and work and so on, as well as males. Differences in the patterns of men's and women's leisure time, including participation and non-participation in recreational sporting activities are heavily influenced by religious factors (see section 4.1.4).
- E) Lack of awareness ($t = -4.89$, $df = 596$, $p < .001$): this constraint was found to be more significant for the IS female than for the IS male sample. As mentioned before, this constraint with reference to the situation in the area of the investigation (university), it should be noted that students are more or less aware of the existence of the facilities (see sections 4.2.1.2). It could be argued, based on both the researcher's experience and the respondents' scores on the items included within the lack of knowledge, (such as "I do not know what is available" and "I do not know where to participate"), that sports organisation at Esfahan university should work more carefully on issues related to the

promotion of their services particularly for female students.

F) Health / fitness ($t = -2.59$, $df = 596$, $p < .01$): this constraint was found to be more significant for the IS female than for the IS male sample. An examination of the individual items included within this dimension suggests that they relate mainly to the following dimensions: perceived self-skills and perceived self-competence (see section 4.1.5). As stated before, in Iran, girls participate less in recreational sporting activities than boys, because of the culture and religion (see section 4.1.4).

As can be seen, these constraints can be affected by culture, religion, politico-ideological environment, ecological factors, and economics. This should be considered by those responsible for the planning, management and delivery of sport related services all over the world.

Differences in patterns of males' and females' leisure time, including participation or non-participation in sport or physical recreation activity are heavily influenced by cultural factors. These different patterns might indicate that males and females have different expectations and are driven by different motives towards participation in sport. However, in order to draw conclusions and make suggestions about the provision of sport services, these motives should be investigated. According to Henderson (1994) a critical examination of differences results in the conclusion that perhaps differences are created, not discovered. Since differences may be a function of culture and how society constructs the meaning of differences, claims about differences are often difficult to interpret because they are offered as value-free but suggest normative considerations. Thus, the social psychological analysis of gender as a framework for women and men's behaviour and the relationships that exist are likely to provide the most useful interpretations in the future. Further evidence of gender differences in leisure opportunities and behaviour among young people can be found in the

D.E.S. (1983) survey: Young people in the 80's. (The survey, which was based on a national sample of 14-19 year olds, also provides data on other variables including social background, employment status, age, location and ethnicity). Carrington et al. (1987) noted that the data, both qualitative and quantitative, showed that girls' leisure tends to be more home-based than boys', and that parents place fewer restrictions on boys' out-of-home activities than girls. Boys, it would appear, are more likely than girls to spend their leisure-time visiting friends or going to pubs, the cinema, concerts and sports matches, 'hanging about' on street corners, outside chip shops, in arcades and shopping centres, and taking part in sport. As Jackson and Henderson (1995) pointed out, most females and males make leisure choices because of context and relationship, not simply because they are biologically a man or woman. What people often fail to realise, however, is how the cultural expectations of biological sex result in gendered decisions. For example, because women are the primary caretakers of children in their society they are often more constrained in their leisure—not necessarily because they are female, but because of the gender role that is typically expected of women. They also suggested that no single or simple meaning can be found in confronting differences of any fixed binary position. No single gender theory can explain these between gender and within gender differences or similarities. Furthermore, the question of "how much difference the differences make" remain, regardless of whether the differences are between gender or within gender. The nature of life style is different for most females in Iran, as in other Muslim countries; male members of the family have greater independence than female ones. As stated before, young Iranians were subject to far greater parental control in all areas of their lives, especially where activities outside the home and friendships with members of the opposite sex were concerned. Apart from cultural factors, women are more likely to be tied to the home by domestic affairs, while for men are more free to go out. In contrast, in England, as in other Christian countries (particularly in western cultures), male and female more or less share domestic duties and they are more

likely to have equal opportunities to go out. As many researchers (e.g., Henderson, 1994; Kay, 1996; and Samuel, 1996) noted, although in the last three decades traditional structures have ultimately changed for women, they still continue to be centrally affected by the interaction of work with family life, including housework and child care, even if they have economic responsibilities either at home or out of the home. Furthermore, this is particularly the case for married women. Green, Hebron and Woodward (1990, 1995), in a qualitative study conducted in England, reported a wide range of intrapersonal constraints which affected females' participation in sport, like lack of self-confidence, self-image, social control and cultural factors. Also females were shown to be more influenced than males by accessibility / financial constraints. According to Scraton (1994), women's lives are determined by material conditions and the social construction of masculinity and femininity. In conclusion, the results regarding the association between gender and sport participation indicate that females were less likely to participate in sports than males. Once again, the important issue for the practitioners relates to the existence of a latent demand for participation in sport among females non-participants. Consequently, females should be specifically targeted in order to remove possible constraints which block their participation. Gender was shown to be significantly related to participation in sport. As mentioned before, both ES and IS male samples were shown statistically to have significantly higher participation rates than female ones. Comparison between the two groups' scores in the whole constraints scale for both ES and IS samples indicated that females were overall significantly more constrained than males, and this might explain females' lower participation rate. This finding supports research such as Jackson and Henderson (1995), Raymore et al (1994) and Alexandris and Carroll (1997b). Some interesting results in terms of the perception of constraints dimensions by the two gender groups are worth noting. Significant differences between the ES male sample and the ES female sample were found in the lack of time, lack of money, unawareness and lack of skill/ability constraints. Significant

differences between the IS male sample and the IS female samples were found in the lack of time, lack of interest, transportation problems, lack of partner, unawareness and lack of health/fitness constraints. These constraints might be to a large degree responsible for the women's lower rates of participation in sport. It should be noted that these dimensions have been conceptualised by previous investigators, such as Crawford and Godbey (1987) and Alexandris and Carroll (1997a), as intrapersonal constraints. These findings support studies from North America, England and Greece. Raymore et al (1994) reported that females experienced more intensively intrapersonal constraints, such as shyness, self-consciousness, lack of skill/ability and awareness of the availability of opportunities to participate. Koroneou (1996) reported that this result was especially applicable to older women, most of whom do not have their own cars, and housewives, and whose financial resources are sometimes limited. Green et al (1990) found that 64% of females reported "lack of money" as an important constraint on their participation in sport. Unfortunately, in the absence of any national or local data related to participation in sport in Iran, it is impossible to compare these findings and to draw more definite conclusions. Comparison between the ES female and IS female samples showed that the IS female sample was overall significantly more constrained than the ES one. As discussed before, factors such as lack of time, lack of money, transportation problems, lack of facilities are structural, lack of partner is an interpersonal constraint and lack of interest and lack of skill/ability are intrapersonal constraints. It is worth noting that factors such as religion (Islam) and lack of facilities could have affected these constraints dimensions in Iranian females. Comparison between the ES male and IS male samples again showed that the IS male sample was overall significantly more constrained than ES ones. As can be seen, statistical differences between the ES male sample and the IS male sample were found in lack of money, transportation problems, lack of facilities, lack of partner and lack of skill/ability. Once again, it is worth pointing out that these dimensions include constraints which have been conceptualised as structural,

interpersonal and intrapersonal constraints and factors like culture and lack of facilities could influence Iranian males. However, as expected, Iranian individuals were significantly more constrained than English ones. As mentioned earlier in this chapter and referred to also in chapter 4, factors such as religion, culture, politico-ideological environment and economic factors might be among the main reasons for the lower participation in sport by Iranian individuals.

7.4 The Relationship between Perception of Constraints and Frequency of Participation in Sport

Frequency of participation in activities has been shown to be related to various indicators of well-being, such as life satisfaction Kelly, Steinkamp and Kelly (1987); Ragheb and Griffith, (1982); Riddick and Daniel (1984) or the Cantril Ladder format (“worst possible life” to “best possible life”) Palmore (1979). Support for this idea has not been consistent, however. For instance, Lemon, Bengston and Peterson (1972) found that among a group of measures that operationalised activity, only informal activities with friends was associated with life satisfaction. Curler (1976), and Hoyt, Kaiser, Peters and Babchuk (1980) are among several studies that failed to demonstrate any relationship between formal activities and well-being. A need was thus seen to determine whether some types of well-being are differentially related to activity participation.

Crawford et al (1991), on developing the hierarchical model of leisure constraints, suggest that constraint factors might continue to have relevance even after an individual takes up participation in a given activity. They also suggested that constraints might influence subsequent aspects of engagement, such as the person’s frequency of participation. This argument was supported by Jackson et al (1993), who developed the negotiation

proposition. The same authors suggested that constraints do not always result in non-participation, but they might also result in modified participation. They also suggested that participation resulting from negotiation is likely to be different from participation that has occurred in the absence of constraints. Carroll and Alexandris (1997) supported these arguments and indicated that constraints influence participants and their frequency of sport participation.

The findings of the present study provided support for these arguments and indicated that constraints also affect participants and their frequency of sport participation.

The perception of constraints are discussed below:

Frequency of participation (rarely, moderate, and frequent) by nine constraints factors were statistically analysed by ANOVA in order to examine whether the frequency of participation in sport decreases perception of constraints.

For the ES male and female combined samples, comparisons between the three groups' scores in the whole scale and in the sub-scales revealed significant differences. In terms of the whole scale, the scores significantly ($F=12.78$, $p<.001$) decreased with increased frequency of participation in sport. The rare participants had the highest mean score ($m=79.82$), followed by the moderate ($m=69.39$) and frequent ($m=65.20$) participants. Post-hoc investigations (Scheffe's test) revealed significant differences between the rare ($m=79.82$) and both the moderate ($m=69.39$) and the frequent ($m=65.20$) participants' scores. Significant differences were found in five of the constraints dimensions: lack of time, lack of interest, social (lack of partner), lack of skill/ability, and health/fitness. Scores for the access to facilities dimension increased with increased frequency of participation in sport, in the order rare ($m=5.70$), moderate ($m=5.83$) and frequent ($m=6.24$). The most significant differences ($F=16.95$, $p<.001$) were found in the skill/ability dimension. The frequent participants ($m=8.15$) scored significantly lower than both the rare ($m=11.79$) and

moderate ($m=9.29$) participants. The rare participants had the highest mean scores in the lack of skill/ability ($m=11.79$). In both the moderate ($m=10.31$) and the frequent ($m=9.23$) participants, the highest mean scores were revealed in lack of time (see table 6.30)

In the ES male sample, comparisons between the three groups' scores in the whole scale and in the sub-scales revealed significant differences. In terms of the whole scale, the scores significantly ($F=8.43$, $p<.001$) decreased with the frequency of participation in sport. The rare participants had the highest mean score ($m=82.78$), followed by the moderate ($m=68.36$) and frequent ($m=64.18$) participants. Post-hoc investigations (Scheffe's test) revealed significant differences between the rare ($m=82.78$) and both the moderate ($m=68.36$) and the frequent ($m=64.18$) participants' scores. In terms of the constraint dimensions, significant differences were found in five of them: lack of time, lack of interest, lack of money, social factors (lack of partner), and lack of skill/ability. Scores in two dimensions did not decrease with the frequency of participation in sport. These were access to facilities (rare, $m=6.07$), (moderate, $m=5.75$) and (frequent, $m=6.34$), and lack of money (rare, $m=10.00$), (moderate, $m=7.68$) and (frequent, $m=7.85$). The most significant differences ($F=9.29$, $p<.001$) were found in the lack of interest dimension. The frequent participants ($m=5.89$) scored significantly lower than both the rare ($m=9.00$) and moderate ($m=6.72$) participants. The moderate participants had the highest mean scores in lack of time ($m=9.93$). Also in both the rare ($m=11.57$), and frequent ($m=9.35$) participants the highest mean scores were revealed in health/fitness (see table 6.31).

In the ES female sample, comparisons between the three groups' scores in the whole scale and in the sub-scales revealed significant differences. In terms of the whole scale, the scores decreased significantly ($F=4.32$, $p<.05$) with increased frequency of participation in sport. The rare participants had the highest mean score ($m=77.75$), followed by the moderate

($m=70.07$) and frequent ($m=66.50$) participants. Post-hoc investigations (Scheffe's test) revealed significant differences between the rare ($m=77.75$) and both the moderate ($m=70.07$) and the frequent ($m=66.50$) participants' scores. Significant differences were found in five constraint dimensions: lack of time, lack of interest, social (lack of partner), lack of skill/ability, and health/fitness. Scores in two dimensions did not decrease with increased frequency of participation in sport. These were access to facilities (rare, $m=5.45$), (moderate, $m=5.89$) and (frequent, $m=6.10$) and lack of money (rare, $m=8.80$), (moderate, $m=8.28$) and (frequent, $m=8.84$). The most significant differences ($F=8.17$ $p<.001$) were found in the lack of skill/ability and health/fitness ($F=8.16$, $p<.001$) dimensions. In the lack of skill/ability, the frequent participants ($m=8.64$) scored significantly lower than both the rare ($m=12.25$) and moderate ($m=9.53$) participants. The rare participants had the highest mean scores in lack of skill/ability ($m=12.25$). In both the moderate ($m=10.57$), and the frequent ($m=9.79$) participants, the highest mean scores revealed were in lack of time (see table 6.32).

For the IS male and female combined sample, comparisons between the three groups' scores in the whole scale and in the sub-scales revealed no significant differences. In terms of the whole scale, the scores decreased with increased frequency of participation in sport. The rare participants had the highest mean score ($m=83.56$), followed by the moderate ($m=80.04$) and frequent ($m=77.44$) participants. Post-hoc investigation (Scheffe's test) revealed no significant differences between participants' scores. Significant differences were found in only one constraint dimension, namely lack of skill/ability ($F=3.90$, $p<.05$). Scores in two dimensions did not decrease with increased frequency of participation in sport. These were lack of interest (rare, $m=7.36$), (moderate, $m=6.69$) and (frequently, $m=6.85$) and unawareness (rare, $m=5.90$), (moderate, $m=6.17$) and (frequently, $m=5.76$). The most significant differences ($F=3.90$ $p<.05$) were found in the lack of skill/ability dimension. In

the lack of skill/ability the frequent participants ($m=9.33$) scored significantly lower than both the rare ($m=10.83$) and the moderate ($m=10.20$) participants. Rare ($m=11.93$), moderate ($m=11.41$), and frequent ($m=10.90$) participants had their highest mean scores in the social (lack of partner) dimension (table 6.33).

In the IS male sample, comparisons between the three groups' scores in the whole scale and in the sub-scales revealed no significant differences. In terms of the whole scale, scores decreased with the increase frequency of participation in sport. The rare participants had the highest mean score ($m=83.50$), followed by the moderate ($m=77.49$) and frequent participants ($m=75.60$). Post-hoc investigation (Scheffe's test) revealed no significant differences between participants' scores. Significant differences were found in only one constraint dimension, namely lack of skill/ability ($F=3.16$, $p<.05$). Scores in three dimensions did not decrease with the frequency of participation in sport. These were transportation (rare, $m=7.64$), (moderate, $m=7.01$) and (frequent, $m=7.40$), social 'lack of partner' (rare, $m=12.21$), (moderate, $m=9.98$) and (frequent, $m=10.41$) and unawareness (rare, $m=5.64$), (moderate, $m=5.72$) and (frequent, $m=5.15$). The most significant differences ($F=3.16$, $p<.05$) were found in the lack of skill/ability dimension. In the lack of skill/ability frequent participants ($m=9.18$) scored significantly lower than both the rare ($m=10.92$) and the moderate ($m=10.23$) participants. The moderate participants had the highest mean scores in the lack of money dimension ($m=10.38$). In both the rare ($m=12.21$), and the frequent ($m=10.41$) participants the highest mean scores were revealed in the social isolation (lack of partner) dimension (see table 6.34).

In the IS female sample, comparisons between the three groups' scores in the whole scale and in the sub-scales revealed no significant differences. In terms of the whole scale, scores did not decrease with the frequency of participation in sport. The moderate participants had the highest mean score ($m=84.30$), followed by the rare ($m=83.62$) and frequent ($m=79.33$)

participants. Post-hoc investigation (Scheffe's test) revealed no significant differences between participants' scores. Significant differences were found in only one dimension, namely, social 'lack of partner' ($F=5.00$, $p<.01$). Scores in five dimensions did not decrease with the frequency of sport participation. These were: a) lack of interest (rare, $m=7.31$), (moderate, $m=6.81$), and (frequent, $m=7.27$), b) transportation (rare, $m=8.00$), (moderate, $m=8.72$) and (frequent, $m=7.78$); c) lack of facilities (rare, $m=8.31$), (moderate, $m=8.42$), and (frequent, $m=8.28$); d) social 'lack of partner' (rare, $m=11.68$), (moderate, $m=13.78$) and (frequent, $m=11.40$); e) unawareness (rare, $m=6.12$), (moderate, $m=6.91$) and (frequent, $m=6.40$). The most significant differences ($F=5.00$, $p<.01$) were found in the social (lack of partner) dimension. The frequent participants in the social 'lack of partner' ($m=11.40$) scored significantly lower than both the rare ($m=11.68$) and the moderate ($m=13.78$) participants. The rare participants had the highest mean scores in the health/fitness ($m=12.06$). In both the moderate ($m=13.78$), and the frequent ($m=11.40$) participants, the highest mean scores were revealed in the social factors (lack of partner) dimension (see table 6.35).

As can be seen above, the perception of constraints significantly decreased with the frequency of participation in sport, which suggests that individuals who experience low levels of constraints are more likely to participate frequently in sport than individuals who experience high levels of constraints. However, it should be pointed out, that intrapersonal constraints were responsible for that significant and negative relationship between constraints and participation. Although structural and interpersonal constraints were also found to have a negative relationship with participation.

Crawford et al (1991) proposed that the levels of constraints are ordered from the most proximal (intra-personal) to the most distal (structural), and that intra-personal constraints

on leisure participation, as the most proximal, are the most powerful of the three, and structural constraints, as the most distal, are the least powerful. The results of the current study, partially supported Crawford et al's (1991) model.

A comparison between these results and those regarding the perception of constraints by participants and non-participants separately indicates a clear decline in the influence of intra-personal constraints within the participants.

However, it seems that because of the difficulties in precisely measuring the frequency of participation in sport, the survey of the relationship between frequency of participation in sport and perception of constraints is a complex issue. For example, according to Carroll and Alexandris (1997), constraints, such as accessibility / financial and facilities / services (structural) were not shown to be negatively related to the frequency of participation in sport, although they could be expected to be so, as stated by (Coalter, 1993).

This might be due to the methodological limitations of the study. Comparisons between the results of different studies should always be made very carefully, as methodological issues should be considered, although in the present study frequency of participation was measured ordinally and for the year before the investigation, it was the same as in the study of Carroll and Alexandris (1997). More detailed measures of the frequency of participation, like mean hours per week, could help towards a further explanation of these issues.

In summary, the results regarding the relationship between the perception of constraints and participation in sport provide support for the hierarchical model of leisure constraints, as proposed by Crawford et al (1991). Intrapersonal constraints together with time related constraints were the most powerful predictors of sport participation / non-participation. Furthermore, the present study indicated that the two aspects, participation / non-participation and frequency of sport participation (or levels of sport participation), should be investigated separately, as different constraints dimensions influenced these two aspects.

Time, lack of interest, lack of partner, lack of skill/ability and health/fitness related constraints were shown to be significantly related to the frequency of sport participation. However, the relationship between perception of constraints and the frequency of sport participation needs further empirical investigation, in which more detailed measurement of the frequency of participation should be employed.

It is worth examining these figures from a health perspective. It has been suggested, for example in Howley and Franks (1992) and Wankel and Berger (1990) that in order to gain cardio-respiratory fitness benefits through participation in sports and exercise an optimum frequency of three to four times per week is required. Hence, those who participate at least once a month and particularly those who participate less than once a month do not gain significant health benefits by their participation in sport. The issue of the proportion of the participants who gain health benefits by their participation in sport, particularly in Iran needs further investigation. Detailed measures of participation in sport, in terms of the frequency, duration and intensity are necessary in order to clarify these issues. However, the frequency of participation in sport was measured as a dichotomous variables (frequent versus infrequent participation). This does not provide an accurate measurement of the frequency of participation, and consequently the results might have been affected by this methodological limitation.

CHAPTER EIGHT

CONCLUSION AND NECESSARY FURTHER RESEARCH

8. Conclusion

This study has examined and shown the constraints on participation in sporting activities in two samples of student populations, one from England and one from Iran. It has confirmed a model of constraints consisting of three general categories: intra-personal, interpersonal, and structural, as well as a number of constraint factors. Both ES male and female combined sample, male separate, and female separate samples and IS male and female combined sample, male separate, and female separate samples were found to be influenced most by structural constraints. In the investigation, the mean scores for the perception of constraint factors on participation in recreational sporting activities did not support the concept of a hierarchy of leisure constraints. However, this concept was supported by the observed relationship between the perception of constraints and the level of participation / non-participation in recreational activities in both ES and IS samples.

Comparison of demographic differences in the perception of constraints dimension between the ES male and female combined sample and the IS male and female combined sample, between the ES male sample and the IS male sample and between the ES female and the IS

female sample groups revealed similarities between the two in each case. All IS sample mean scores were higher than ES sample mean scores in all groups, which means that the constraints were more likely to influence leisure participation in IS samples in all groups. Support is given to the view that structural constraints are perceived as the most powerful constraints, which are more likely to affect leisure participation. Intra-personal and interpersonal constraints were found to be less important. Despite the fact that Iran and England have different socio-cultural, religious, economic, ideological and political backgrounds, structural, interpersonal, and intra-personal constraints have appeared in the same hierarchy of importance in the two countries. These findings as Jackson (1988) pointed out, can help the management of recreational sporting activities services when constraints on participation are understood. The university authorities in both Esfahan and Manchester can examine these constraints and attempt to help the students overcome them if they wish to increase their participation. Attention may well focus on structural constraints such as an increase in facilities and accessibility and a decrease in costs.

With respect to the relative importance of the constraints, four structural constraints: lack of money, lack of time, lack of facilities, and transportation problems were reported as the most intensively experienced constraints. Social constraints such as interpersonal constraints were found to be less important. Finally, intra-personal constraints: lack of interest, lack of skill/ ability, unawareness and health/fitness were seen to be of minor importance. This conclusion has been supported by several investigators, including Hultsman (1992), Jackson and Rucks (1993) and Jackson (1993) who did not support the hierarchical model of importance proposed by Crawford et al (1991).

A similar but different hierarchy was observed when the ES male and female combined sample and the IS male and female combined sample, the ES male sample and the IS male

sample and the ES female and the IS female sample groups were investigated further in order to discover the relationship between the perception of constraints by participants and by non-participants in recreational sporting activities. The hierarchy, here was revealed as in the order intra-personal, structural and interpersonal constraints in all groups for both participants and non-participants. Again all IS sample mean scores were higher than ES sample mean scores in all participant and non-participant groups. Evidence shows that intra-personal constraints are perceived as the most powerful constraints, which are more likely to affect leisure participation, with structural and interpersonal constraints seen to be less important.

The results of this study confirm the results of previous studies. Further research with qualitative methodologies could offer possibilities for clarification and refinement of such findings. The knowledge gained from the current study provides an initial insight that could give rise to measures which might increase leisure participation, from which society as a whole could benefit. However, there were limitations to this study with respect to the measurement of participation. Participation during the previous year was used as the index of participation and non-participation. Further refinement of this measure to include frequency of participation would be useful.

The relative importance of constraints dimensions was investigated for all of the participant and non-participant sub groups in all the samples (the ES male and female combined sample and the IS male and female combined sample, the ES male sample and the IS male sample and the ES female and the IS female sample) groups. The intra-personal constraints of lack of interest, lack of skill/ability, unawareness and health/fitness were reported as the most intensively experienced constraints, an interpersonal constraint: social factors (lack of partner) were reported as less important, and structural constraints: lack of facilities, lack of

time, lack of money and transportation problems were reported as of minor importance in all sub groups. This constraint hierarchy has been supported by Crawford et al (1991) (although there is little empirical support for it in the literature). They stated that:

“... the constraints level are arranged from most proximal (intra-personal) to most distal (structural). Thus intra-personal constraints on leisure participation are conceptualised as being the most powerful, due to the fact that they condition the will to act”. (Crawford et al., 1991, p. 314).

The identification of the constraints on participation in recreational sport was made the main objective of the present study, since, according to Jackson (1988) and McGuire and O’Leary (1992), the identification of the constraints experienced by individuals can contribute towards more effective planning, management and delivery of sports related services.

Both ES and IS samples in all groups reported a wide range of constraints which either limited or blocked their participation in recreational sporting activities.

The present study implied that participation / non-participation in sport and the frequency (or level) of participation in sport are different matters, which should be investigated separately. They are affected by different constraints. However, the methodological limitations of the investigation, for example the inaccurate measurement of the frequency of participation in sport, might have influenced the results regarding the relationship between the frequency of participation in sport and the perception of constraints. This issue needs further examination.

It is difficult to compare this study with previous studies because of the methodological differences. To some extent, these differences are inevitable, as they relate to the operation

of different samples and participation in different sport and recreation activities, and the stages of progress of the theoretical base in different investigations. To compare the two countries, the present study has made an attempt to adopt the theories and models (e.g., negotiation theory, hierarchical model of leisure constraints) developed and empirically tested in America, Canada, and England, and to apply them in Iran. Despite the differences between the two countries, with respect to culture, language, religion, politics and so on the findings of the study suggested that there is a “universality” and cross-cultural suitability of the theories. Unfortunately, there is little cross-cultural investigation in this area, so that further investigation is obviously required for the cross-cultural comparisons (Liponski, 1994; Beckers, 1995; Stockdale, Wells, & Rall, 1996).

8.1 Suggestions

The present study indicated that the promotion of participation in recreational sport has been neglected by both Manchester and Esfahan universities.

It is suggested that:

- The management of both Manchester and Esfahan universities adopt a strategic approach to the planning and promotion of recreational sports. An explicit scheme should be developed, which involves particular objectives, as well as schemes and courses of actions indicating how these objectives would be attained. Furthermore, system of analysis, based on empirical methods (e.g., sport participation rates), should be adopted in order to evaluate the achievement of the scheme.
- Sports Directors should be financially supported by the management of the universities in order to promote facilities, equipment, coaches, etc.

- The universities should co-operate with the respective Ministries responsible for higher education in each country to promote mass participation.
- The university of Esfahan the same as Manchester university should support voluntary sport clubs in order to promote mass participation.

The study addressed several issues related to the practical development of participation in sporting activities. As a result, a number of measures are suggested, the most of important of which are summarised below:

- Sports facilities both outdoor and indoor (particularly in Iran) should be provided. The provision of accessible sport facilities extends quality services and helps towards expanding the individual's participation.
 - A variety of sport and recreational services / schedules should be provided (particularly in Iran). These services should include both supervised activities such as physical fitness, and teaching sessions, such as swimming and skill/ability programmes for a diversity of sports.
 - The quality of the sports programmes delivered is as essential as the quality of the sports and recreation facilities. Also, the behaviour of staff is very important in creating a friendly and relaxing atmosphere.
 - Schedules should fit the requirements of the participants. For instance, competitive activities and team games should be provided for the university students because, as a young group, they are attracted by competition.
 - Time-tables should be flexible for individuals. Activities could be scheduled outside of working hours, for instance, in the early morning, in the evening, or at weekends.
- League and competitive events (individual and team activities) can be arranged by both universities and the education ministries. Also, it is very important

that both males and females be involved.

- Participation in recreational sporting activities should be linked with social events, meetings and celebrations (such as after the sessions or at the end of a competition).
- Voluntary clubs should adopt a new approach to the planning, management and delivery of their services. Target marketing is suggested.
- Admission free of charge or for a small admission fee is suggested to avoid financial problems.
- Participation in recreational sporting activities should be promoted by the government with large campaigns through the media. In particular the health benefits of participation in sport should be emphasised (e.g., Active for Life: physical Activity Campaign, 1996).
- The help of the peer group and even family members (e.g., brothers and sisters) should be enlisted, family members should be encouraged to participate together in recreational sporting activities and fun programmes.
- Schedules should fit the skill/ability and also the fitness levels of the participants. Appropriate programmes should be provided, for instance, jogging, light exercise, for both individual (walking, running), team games (volleyball, basketball), and also fun activities. Activities should be arranged for beginners as well.
- Particular groups of the population, such as females, should be targeted especially in Iran because they cannot participate in recreational sporting activities outdoors.
- It is very important that the development of an active life-style start with the schools. Consequently, close co-operation between local authorities and schools is required.
- Close co-operation between physical education teachers and sports development officers from the recreation department of both local and also central authorities is also required.

- There should be greater attempts made on the part of leisure researchers and practitioners to acquire data on non-participation. It is only through the understanding gained from non-participation that enhanced services and programmes can be developed.
- The main objective of physical education should be to develop positive attitudes towards participation in sport and to assist lifetime participation. The structure of the physical education curriculum should be reviewed.
- Finally, university authorities should also co-operate with the local and central authorities. They can provide advice about the development of physical recreation. Sport events, for instance, festivals and awareness meetings, can be arranged.

8.2 *Limitations and Further Research*

For future studies, it will be necessary to investigate various types of constraints (intra-personal, interpersonal and structural) simultaneously, in the hierarchical model proposed by Crawford et al. 1991. As Jackson and Rucks (1993) state, these types of constraints become more or less important depending on the precise stage of the leisure decision-making process at which they are experienced.

There are undoubtedly other types of constraints which have not been included in this study. This model, therefore, is open to modification. Although in this investigation structural constraints were consistently the highest recorded constraints supporting constraints of some previous studies such as Raymore et al. (1993), other aspects of constraints (intra-personal and interpersonal) should be noted. As was shown, participation and non-participation intra-personal constraints were consistently the highest recorded constraints.

The samples in the present study were limited to a student population, age group 18-25, i.e. educated young people. Further empirical studies of all these constraints types is required, both comparative and simultaneous to expand this analysis to a full range of groups in terms of gender, age, education level, single, married, with/without children and so on. This will provide more representative results, and more accurate comparisons between participation figures reported in all countries for instance General Household Survey in England. Also regular annual or biennial collection of this sort of data could give the opportunity for a time-series analysis of the data. This could help in the recognition of trends in participation in recreational sporting activities, which is of practical importance to the sport and fitness industry. Robinson and Godbey (1993) suggested that a wide range of non-demographic variables could also be included in a more integrated model. These could be ecological factors (e.g., region, housing type), chronological factors (e.g., day of the week, season, time of work) , and life-style factors (e.g., health, fitness).

Frequency was measured ordinally and for the previous year of the study. It should be noted that both these measures have limitations. Since data on both frequency of participation and duration of each event is required for calculating the total time spent in leisure activities, it is not easy to determine the extent of participation. Whereas, the present study only utilised data about frequency of participation in sport during the year previous to the study, Chase and Harada (1984) and Robinson and Godbey (1993) argued that measures of participation in sport based on a twelve months reference period were unreliable and inaccurate, since for example rates would be overestimated. Further research is required utilising more detailed data regarding the frequency of participation such as frequency, duration, and intensity. Moreover, participation rates based on a four weeks reference period should be examined.

Lack of facilities for recreational sporting activities, as well as limited services were among the main constraints reported by the respondents. Further research is needed specifically to examine quality related aspects of the sport services provided in all areas. Moreover, it would be interesting to compare quality related aspects of the services provided by public and private sports organisations in both England and Iran. Further research is needed about the effective marketing and promotion of sports related services by both private and public organisations.

As discussed in section 8.2., the elimination of intra-personal constraints is not an easy task. These constraints might be due to negative past experiences related to Physical Education in school. To further simplify these issues, investigations should be conducted regarding the structure of the national curriculum of Physical Education in Iran. Besides, as previously mentioned, the elimination of intra-personal constraints, the provision of sport and recreation education and the development of an active life-style in the schools are the main strategies.

The study of the relationship between the frequency of participation in sporting activities and the perception of constraints was shown to be a complex issue. This is because of the difficulties inherent in accurately measuring the frequency of participation in sport. The fact that the relationship between frequency of participation in sport and structural constraints was shown to be not significant might be due to the limitations of the research design (e.g., ordinal measurement of frequency). In order to obtain more detailed and accurate measurements of participation in sport, in which the relationship between these two variables might be adequately investigated, further empirical research is needed.

Jackson et. al. (1993), Henderson et al. (1993), Samdahi and Jekubovich (1993) and Jackson and Rucks (1995) suggested that the degree of success of individuals' participation

in recreational sporting activities depends on the negotiation of the perception of constraints. There might also be other factors, such as personal traits in addition to issues such as the relationship between non-participation and the experience of constraints and issues such as the nature or type of constraints, their relative strength (particularly vis-a-vis motivations), and the point at which constraints are encountered in the decision-making process. This issue needs further empirical investigation.

As discussed before, because of methodological differences, it is not easy to make direct comparisons between previous investigations and the present study. The findings of the present study indicated that there are similarities in constraints across cultures, and that the hierarchical model of leisure constraints (Crawford et al., 1991) developed in the U.S.A. Canada and Great Britain has applicability to the Iranian situation. However, further research is required on the following issues:

- More quantitative and qualitative work to indicate constraints in different populations, the nature and the type of constraints, and to comprehend how they operate in different cultures.
- As Beckers (1995) suggests, a standardisation of instruments is required for cross-cultural comparisons. These standardised instruments must, however, take into account particular cultural contexts and interests.
- This study suggests that the model can cross "the Atlantic divide" (Beckers 1995) and further cross-cultural studies are required to confirm this.

The best way to proceed and to build a new interdisciplinary field that is taken seriously in both academia and society is to establish links and communications between different national traditions and communities of leisure researchers. It is

time to explore the possibilities of universal or contextual strategies in international leisure research and to bridge the "Atlantic Divide." To address actual changes in society and in social theory, and their consequences for leisure research, we need joined forces.

These results point to the importance of further examination of the stability of leisure constructs both within and across samples of respondents. In addition to gender, stage of life cycle and social-economic level, other demographic variables could be specified as possible predictors of leisure choices in further research. This study represents a preliminary attempt to assess the extent to which leisure participation patterns are common to English and Iranian students using a free generation response task. The extent to which leisure constructs show similar or contrasting patterns in cross-national settings merits further study.

Multi-national research can increase our understanding and improve our leisure and recreational sporting practices. However, what is important in the future progress of comparative study in this field is 'critical' research, the development of which may be used in practical/policy formation ways: research should focus on issues of global concern such as the effects of health-related fitness, social needs education, leisure constraints, etc. A strategy of critical cross-cultural collaborative research would help to clarify the situation.

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Appendix A: The Questionnaire of The Pilot Study

Constraints on Sporting Activities Questionnaire

Dear student;

This questionnaire is designed to find out more about the constraints on students participation in sporting activities at the Universities of Manchester and Esfahan.

The researcher's aim is to identify these constraints and attempt to explore ways in which they can best be overcome. It is hoped that as a result of this research, educational institutions and sporting organisations will be able to encourage more young people especially students to participate in sporting activities.

The time taken to complete this questionnaire will be greatly appreciated. Answer all questions if you can.

M. Ehsani (Ph.D. student)
The University of Manchester
Centre for Physical Education and Leisure Studies

Appendix A: The Questionnaire of The Pilot Study

Please provide some information about yourself.

Sex: Male () - Female ()

Domestic status: Single () - Married ()

Birth year:

Did you take part in a recreational or sporting activity in the last 12 months?

YES

NO

Evaluate the importance of the following statements a prohibiting or limiting factors for your sporting activity participation or for your non-participation.

A= Very Important

B= Quite Important

C= Somewhat Important

D= Not Important

Make sure you fill in only one square with a tick () for each statement and answer all statements. If you have made a mistake and wish to change your answer, please score off your response, and fill in the square appropriately.

- | | | | | |
|--|---|---|---|---|
| 1. I do not have enough time because of my work/studies. | A | B | C | D |
| 2. I do not have enough time because of my family commitments. | A | B | C | D |
| 3. I do not have enough time because of domestic commitments. | A | B | C | D |
| 4. I do not have enough time because of other social commitments. | A | B | C | D |
| 5. The timetable which has been offered by the University does not fit in with a sport schedule. | A | B | C | D |
| 6. I am not interested in doing sporting activity. | A | B | C | D |
| 7. I did not enjoy it in the past. | A | B | C | D |
| 8. I do not want to interrupt my daily schedule. | A | B | C | D |
| 9. I do not like the activities that are available. | A | B | C | D |
| 10. I cannot afford the expense needed for participating in sporting activity. | A | B | C | D |

Appendix A: The Questionnaire of Pilot Study

- | | | | | |
|--|---|---|---|---|
| 11. Cost of transportation for participating in sporting activities is too much. | A | B | C | D |
| 12. Cost of sports equipment for participating in sporting activities is too much. | A | B | C | D |
| 13. Admission fees and charges for using facilities are too much. | A | B | C | D |
| 14. I have no opportunity to participate in sporting activity where I live. | A | B | C | D |
| 15. I have no transport from home to sporting activity amenities. | A | B | C | D |
| 16. Transportation to the activities takes too much time. | A | B | C | D |
| 17. The facilities are inadequate. | A | B | C | D |
| 18. The facilities are crowded. | A | B | C | D |
| 19. The facilities are poorly kept or maintained. | A | B | C | D |
| 20. I have nobody to participate with in sporting activities. | A | B | C | D |
| 21. My friends do not have the time to participate in sporting activities. | A | B | C | D |
| 22. My friends do not like participating in sporting activities. | A | B | C | D |
| 23. I am not at ease in social situations in sporting activities. | A | B | C | D |
| 24. Opportunities are limited because of socio-cultural constraints. | A | B | C | D |
| 25. I do not know where I can participate. | A | B | C | D |
| 26. I do not know what is available. | A | B | C | D |
| 27. I do not know where I can learn a sporting activity? | A | B | C | D |
| 28. I am not skilled enough. | A | B | C | D |
| 29. I do not have anyone to teach me how to learn sporting activities. | A | B | C | D |
| 30. I do not feel self confident about my skills. | A | B | C | D |
| 31. I am generally very poor at sporting activity. | A | B | C | D |
| 32. I am embarrassed when playing sport because of my low ability level. | A | B | C | D |

Appendix A: The Questionnaire of Pilot Study

- | | | | | |
|--|---|---|---|---|
| 33. I am not generally fit enough to participate in sporting activity. | A | B | C | D |
| 34. I have health problems. | A | B | C | D |
| 35. Taking part in sporting activity makes me feel tired. | A | B | C | D |
| 36. I am too tired to take part in sporting activity. | A | B | C | D |
| 37. I am afraid of getting hurt/injured. | A | B | C | D |
| 38. I am not concerned about health. | A | B | C | D |

If you did not understand any of the questions, please write your comments.

Appendix A: The Questionnaire of Pilot Study

به نام خدا

پرسشنامه پیرامون عوامل بازدارنده فعالیت‌های ورزشی

دانشجوی عزیز :

این پرسشنامه جهت شناخت عوامل بازدارنده فعالیت‌های ورزشی دانشجویان دانشگاه‌های اصفهان و منچستر تدوین شده است . شناخت این عوامل و تلاش در جهت رفع آنها هدف عمده محقق است . امید که بتوان در آینده با برنامه‌ریزی‌های بهتر نیازهای ورزشی جوانان بخصوص دانشجویان عزیز را بطور مؤثری پاسخ داد .

دقت ، صبر و صداقت در پاسخگویی ، کمال همکاری شما با محقق را رسانده و به این وسیله محقق مراتب تشکر و قدردانی خود را اعلام می‌دارد.

محمّد احسانى

دانشجوی دوره دکتری دانشگاه منچستر - انگلستان

Appendix A: The Questionnaire of Pilot Study

جنس: ☐ مرد ☐ زن

وضعیت تأهل: ☐ مجرد ☐ متأهل:

تاریخ تولد: / / ۱۳

آیا در طی ۱۲ ماه گذشته عواملی مانع شرکت کردن شما در فعالیتهای تفریحی و یا ورزشی شده است.

☐ بلی ☐ خیر

به چه اندازه اهمیت عوامل زیر در محدودیت یا جلوگیری شما در فعالیتهای ورزشی نقش داشته است.

الف = خیلی اهمیت داشته است. ج = تا حدودی اهمیت داشته است.

ب = اهمیت داشته است. د = اهمیت نداشته است.

دقت نمائید که برای هر پاسخ تنها یک مربع را تیک (✓) بزنید و به تمام پرسشها پاسخ

دهید. اگر پرسشی را اشتباه علامت زدید و خواستید پاسخ را تغییر بدهید پاسخ قبلی را پاک یا

خط زده و مربع پاسخ مورد نظر را علامت بزنید.

شماره

Appendix A: The Questionnaire of Pilot Study

سوالات:

اهمیت نداشت است	تأخیری اهمیت داشته است	اهمیت داشته است	خیلی اهمیت داشته است	
د	ج	ب	الف	
				۱- به علت امور درسی و شغلی وقت کافی ندارم.
				۲- به علت تعهدات خانوادگی وقت کافی ندارم.
				۳- به علت تعهدات خویشاوندی وقت کافی ندارم.
				۴- به علت سایر تعهدات اجتماعی وقت کافی ندارم.
				۵- ساعتهای پیشنهاد شده دانشگاه برای فعالیتهای ورزشی با وقت من تنظیم نیست.
				۶- علاقه‌ای به فعالیتهای ورزشی ندارم.
				۷- از فعالیتهای ورزشی در گذشته لذتی نبرده‌ام.
				۸- نمی‌خواهم به خاطر فعالیتهای ورزشی برنامه روزانه خود را قطع کنم.
				۹- فعالیتهای ورزشی موجود را دوست ندارم.
				۱۰- هزینه مورد نیاز برای شرکت در فعالیتهای ورزشی را ندارم.
				۱۱- هزینه رفت و آمد برای شرکت در فعالیتهای ورزشی خیلی زیاد است.
				۱۲- هزینه خرید وسایل ورزشی برای شرکت در فعالیتهای ورزشی خیلی زیاد است.
				۱۳- هزینه برای استفاده از امکانات ورزشی خیلی زیاد است.
				۱۴- امکانات ورزشی نزدیک محل سکونت خود ندارم.
				۱۵- وسیله نقلیه برای رفتن به اماکن ورزشی ندارم.
				۱۶- وسیله نقلیه عمومی وقت زیادی می‌گیرد.
				۱۷- امکانات ورزشی کافی نیست.
				۱۸- از امکانات ورزشی موجود تعداد زیادی استفاده می‌کنند.
				۱۹- از امکانات ورزشی موجود خوب نگهداری به عمل نمی‌آید.
				۲۰- کسی را ندارم که به اتفاق او در فعالیتهای ورزشی شرکت کنم.
				۲۱- دوستانم فرصت شرکت در فعالیتهای ورزشی را ندارند.
				۲۲- دوستانم به شرکت در فعالیتهای ورزشی علاقه ندارند.
				۲۳- در موقعیتهای اجتماعی آسایش فکری ندارم.

Appendix A: The Questionnaire of Pilot Study

د	ج	ب	الف	
				۲۴- امکان فعالیتهای ورزشی به دلیل قید و بندهای فرهنگی - اجتماعی محدود است .
				۲۵- نمی دانم در چه اماکنی می توان در فعالیتهای ورزشی شرکت کرد.
				۲۶- از تسهیلات موجود اطلاعاتی ندارم .
				۲۷- نمی دانم کجا می توانم فعالیتهای ورزشی را یاد بگیرم.
				۲۸- در انجام فعالیتهای ورزشی مهارت لازم را ندارم.
				۲۹- کسی را ندارم که به من آموزش بدهد.
				۳۰- به مهارتهای خود اعتماد به نفس ندارم.
				۳۱- بطور کلی در فعالیتهای ورزشی بسیار ضعیف هستم.
				۳۲- در موقع فعالیتهای ورزشی بخاطر ضعف مهارتها و تواناییها خجالت می کشم.
				۳۳- بطور کلی آمادگی کافی برای شرکت در فعالیتهای ورزشی ندارم .
				۳۴- مشکلم سلامت جسم است .
				۳۵- از انجام هر نوع فعالیت ورزشی احساس خستگی می نمایم.
				۳۶- به علت خستگی زیاد و آمادگی فعالیتهای ورزشی را ندارم.
				۳۷- از صدمات و آسیبهای ورزشی هراس دارم.
				۳۸- سلامتی برای من اهمیت ندارد.

توجه : خواهشمند است اگر سؤالی را متوجه نشدید ، یا هر پیشنهادی به نظرتان می رسد در ذیل محقق را راهنمایی نمایید.

با آرزوی موفقیت

Appendix B: The Questionnaire of The Main Study

Please provide some information about yourself.

Sex: Male () - Female ()

Domestic status: Single () - Married ()

Birth year:

Did you take part in a recreational or sporting activity in the last 12 months?

YES

NO

If yes,

How often have you taken part in a recreational or sporting activity in the last 12 months?

Once a week or more?

Once a month or more?

Once a year or more?

Evaluate the importance of the following statements a prohibiting or limiting factors for your sporting activity participation or for your non-participation.

A= Very Important

B= Quite Important

C= Somewhat Important

D= Not Important

Make sure you fill in only one square with a tick () for each statement and answer all statements. If you have made a mistake and wish to change your answer, please score off your response, and fill in the square appropriately.

- | | | | | |
|--|---|---|---|---|
| 1. I do not have enough time because of my work/studies. | A | B | C | D |
| 2. I do not have enough time because of my family commitments. | A | B | C | D |
| 3. I do not have enough time because of domestic commitments. | A | B | C | D |
| 4. I do not have enough time because of other social commitments. | A | B | C | D |
| 5. The timetable which has been offered by the University does not fit in with a sport schedule. | A | B | C | D |
| 6. I am not interested in doing sporting activity. | A | B | C | D |

Appendix B: The Questionnaire of The Main Study

- | | |
|--|---------------|
| 7. I did not enjoy it in the past. | A B C D |
| 8. I do not want to interrupt my daily schedule. | A B C D |
| 9. I do not like the activities that are available. | A B C D |
| 10. I cannot afford the expense needed for participating in sporting activity. | A B C D |
| 11. Cost of transportation for participating in sporting activities is too much. | A B C D |
| 12. Cost of sports equipment for participating in sporting activities is too much. | A B C D |
| 13. Admission fees and charges for using facilities are too much. | A B C D |
| 14. I have no opportunity to participate in sporting activity where I live. | A B C D |
| 15. I have no transport from home to sporting activity amenities. | A B C D |
| 16. Transportation to the activities takes too much time. | A B C D |
| 17. The facilities are inadequate. | A B C D |
| 18. The facilities are crowded. | A B C D |
| 19. The facilities are poorly kept or maintained. | A B C D |
| 20. I have nobody to participate with in sporting activities. | A B C D |
| 21. My friends do not have the time to participate in sporting activities. | A B C D |
| 22. My friends do not like participating in sporting activities. | A B C D |
| 23. I am not at ease in social situations in sporting activities. | A B C D |
| 24. Opportunities are limited because of socio-cultural constraints | A B C D |
| 25. I do not know where I can participate. | A B C D |
| 26. I do not know what is available. | A B C D |
| 27. I do not know where I can learn a sporting activity? | A B C D |
| 28. I am not skilled enough. | A B C D |

Appendix B: The Questionnaire of Main Study

- | | | | | |
|--|---|---|---|---|
| 29. I do not have anyone to teach me how to learn sporting activities. | A | B | C | D |
| 30. I do not feel self confident about my skills. | A | B | C | D |
| 31. I am generally very poor at sporting activity. | A | B | C | D |
| 32. I am embarrassed when playing sport because of my low ability level. | A | B | C | D |
| 33. I am not generally fit enough to participate in sporting activity. | A | B | C | D |
| 34. I have health problems. | A | B | C | D |
| 35. Taking part in sporting activity makes me feel tired. | A | B | C | D |
| 36. I am too tired to take part in sporting activity. | A | B | C | D |
| 37. I am afraid of getting hurt/injured. | A | B | C | D |
| 38. I am not concerned about health. | A | B | C | D |

If you did not understand any of the questions, please write your comments.

پرسشنامه

پیرامون عوامل بازدارنده فعالیت‌های ورزشی

دانشجوی عزیز:

این پرسشنامه جهت شناخت عوامل بازدارنده فعالیت‌های ورزشی دانشجویان دانشگاه‌های اصفهان و منچستر تدوین شده است. شناخت این عوامل و تلاش در جهت رفع آنها هدف عمده محقق است. امید که بتوان در آینده با برنامه‌ریزی‌های بهتر نیازهای ورزشی جوانان بخصوص دانشجویان عزیز را بطور مؤثری پاسخ داد. دقت، صبر و صداقت در پاسخگویی، کمال همکاری شما با محقق را رسانده و به این وسیله محقق مراتب تشکر و قدردانی خود را اعلام می‌دارد.

محمد امسانی

دانشجوی دوره دکتری دانشگاه منچستر - انگلستان

Appendix B: The Questionnaire of Main Study

- جنس: ☐ مرد ☐ زن

- وضعیت تأهل: ☐ مجرد ☐ متأهل

- تاریخ تولد:

- آیا در فعالیتهای ورزشی شرکت می‌کنید؟

☐ بلی ☐ خیر

اگر بلی

۱- یکبار در هفته یا بیشتر؟ ☐ ۲- یکبار در ماه یا بیشتر؟ ☐

۳- یکبار در سال یا بیشتر؟ ☐

- به چه اندازه اهمیت عوامل زیر در محدودیت یا جلوگیری شما در فعالیتهای ورزشی نقش داشته است.

الف = خیلی اهمیت داشته است. ☐ ج = تا حدودی اهمیت داشته است. ☐

ب = اهمیت داشته است. ☐ د = اهمیت نداشته است. ☐

دقت نمائید که برای هر پاسخ تنها یک مربع را تیک (✓) بزنید و به تمام پرسشها پاسخ دهید.

اگر پرسشی را اشتباه علامت زدید و خواستید پاسخ را تغییر بدهید پاسخ قبلی را پاک یا خط زده و مربع پاسخ مورد نظر را علامت بزنید.

Appendix B: The Questionnaire of Main Study

سوالات:

اهمیت نداشت است (کم) د	تاحدودی اهمیت داشته (متوسط) ج	اهمیت داشته است (زیاد) ب	خیلی اهمیت داشته است (بسیار زیاد) الف	
				۱- به علت امور درسی و شغلی وقت کافی ندارم.
				۲- به علت تعهدات خانوادگی وقت کافی ندارم.
				۳- به علت تعهدات خویشاوندی وقت کافی ندارم.
				۴- به علت سایر تعهدات اجتماعی وقت کافی ندارم.
				۵- ساعتهای پیشنهاد شده دانشگاه برای فعالیتهای ورزشی با وقت من تنظیم نیست.
				۶- علاقه‌ای به فعالیتهای ورزشی ندارم
				۷- از فعالیتهای ورزشی در گذشته لذتی نبرده‌ام.
				۸- نمیخواهم بخاطر فعالیتهای ورزشی برنامه روزانه خود را قطع کنم.
				۹- فعالیتهای ورزشی موجود را دوست ندارم.
				۱۰- هزینه مورد نیاز برای شرکت در فعالیتهای ورزشی را ندارم.
				۱۱- هزینه رفت و آمد برای شرکت در فعالیتهای ورزشی خیلی زیاد است.
				۱۲- هزینه خرید وسایل ورزشی برای شرکت در فعالیتهای ورزشی خیلی زیاد است.
				۱۳- هزینه برای استفاده از امکانات ورزشی خیلی زیاد است.
				۱۴- امکانات ورزشی نزدیک محل سکونت خود ندارم.
				۱۵- وسیله نقلیه برای رفتن به اماکن ورزشی را ندارم.
				۱۶- وسیله نقلیه عمومی وقت زیادی می‌گیرد.
				۱۷- امکانات ورزشی کافی نیست.
				۱۸- از امکانات ورزشی موجود تعداد زیادی استفاده می‌کنند.
				۱۹- از امکانات ورزشی موجود خراب نگهداری به عمل نمی‌آید.
				۲۰- کسی را ندارم که به اتفاق او در فعالیتهای ورزشی شرکت کنم.
				۲۱- دوستانه فرصت شرکت در فعالیتهای ورزشی را ندارند.
				۲۲- دوستانه به شرکت در فعالیتهای ورزشی علاقه ندارند.
				۲۳- در موقعیتهای اجتماعی آسایش فکری ندارم

Appendix B: The Questionnaire of Main Study

سوالات:

اهمیت نداشته است (کم) د	تاحدودی اهمیت داشته (متوسط) ج	اهمیت داشته است (زیاد) ب	خیلی اهمیت داشته است (بسیار زیاد) الف	
				۲۴- امکان فعالیتهای ورزشی به دلیل قید و بندهای فرهنگی - اجتماعی محدود است.
				۲۵- نمی دانم در چه اماکنی می توان در فعالیتهای ورزشی شرکت کرد.
				۲۶- از تسهیلات موجود اطلاعاتی ندارم.
				۲۷- نمی دانم کجا می توانم فعالیتهای ورزشی را یاد بگیرم.
				۲۸- در انجام فعالیتهای ورزشی مهارت لازم را ندارم.
				۲۹- کسی را ندارم که به من آموزش بدهد.
				۳۰- به مهارتهای خود اعتماد به نفس ندارم.
				۳۱- بطور کلی در فعالیتهای ورزشی بسیار ضعیف هستم.
				۳۲- در موقع فعالیتهای ورزشی به خاطر ضعف مهارتها و تواناییها خجالت می کشم.
				۳۳- بطور کلی آمادگی کافی برای شرکت در فعالیتهای ورزشی ندارم.
				۳۴- مشکلم سلامت جسم است.
				۳۵- از انجام هر نوع فعالیت ورزشی احساس خستگی می نمایم.
				۳۶- به علت خستگی زیاد، آمادگی فعالیتهای ورزشی ندارم.
				۳۷- از صدمات و آسیب های ورزشی هراس دارم.
				۳۸- سلامتی برای من اهمیت ندارد.

توجه:

خواهشمند است اگر سؤالی را متوجه نشدید، یا هر پیشنهادی به نظر تان می رسد

در ذیل محقق را راهنمایی نمایید.

✱ با آرزوی موفقیت ✱

Appendix C

Table 1 Item Analysis of the Constraint Scale (ES) samples (Pilot Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.42	.89	.39	20	1.89	.97	.61
2	1.25	.55	.47	21	1.98	.94	.70
3	1.49	.65	.40	22	1.89	1.00	.71
4	2.50	.93	.36	23	1.62	.92	.67
5	1.73	.83	.50	24	1.32	.66	.48
6	1.81	1.02	.58	25	1.43	.81	.66
7	1.55	.89	.61	26	1.61	.83	.70
8	1.74	.89	.47	27	1.56	.82	.73
9	1.64	.91	.56	28	1.84	.99	.72
10	2.25	1.02	.54	29	1.64	.90	.62
11	1.89	.93	.62	30	2.02	1.04	.72
12	2.31	.99	.58	31	1.70	.93	.80
13	2.19	.96	.57	32	1.75	.97	.80
14	1.46	.79	.51	33	1.92	.98	.62
15	1.79	1.05	.63	34	1.41	.80	.52
16	1.88	.95	.60	35	1.63	.86	.67
17	1.71	.88	.63	36	1.58	.80	.60
18	2.26	.97	.50	37	1.29	.60	.43
19	1.78	.84	.53	38	1.75	1.00	.36
** Significant Level .01							

Appendix C

Table 2								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales (ES) samples (Pilot Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.36	.49	v1	.58	.56	v1	.63	.76
v2	.39	.47	v2	.54	.60	v2	.62	.76
v3	.44	.43	v3	.41	.67	v3	.64	.75
v4	.35	.61	v4	.40	.68	v4	.62	.77
v5	.37	.47						
Alpha for the sub-scale .58			Alpha for the sub-scale .69			Alpha for the sub-scale .81		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.48	.70	v1	.62	.56	v1	.66	.72
v2	.57	.59	v2	.50	.71	v2	.65	.73
v3	.57	.58	v3	.55	.65	v3	.73	.70
						v4	.48	.78
						v5	.36	.81
Alpha for the sub-scale .72			Alpha for the sub-scale .73			Alpha for the sub-scale .78		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.71	.85	v1	.77	.84	v1	.53	.61
v2	.79	.78	v2	.55	.89	v2	.49	.62
v3	.75	.82	v3	.77	.84	v3	.62	.57
			v4	.72	.85	v4	.50	.62
			v5	.78	.84	v5	.35	.68
						v6	.35	.74
Alpha for the sub-scale .87			Alpha for the sub-scale .88			Alpha for the sub-scale .69		
** Significant Level .01								

Appendix C

Table 3 Item Analysis of the Constraint Scale (IS) samples (Pilot Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.79	1.02	.40	20	2.25	1.22	.71
2	1.51	.83	.60	21	2.01	1.10	.69
3	1.19	.53	.58	22	1.77	1.04	.59
4	1.59	.84	.51	23	2.11	1.23	.52
5	2.38	1.20	.39	24	2.24	1.15	.49
6	1.53	.93	.49	25	1.82	1.08	.70
7	1.62	.98	.67	26	2.04	1.12	.52
8	1.92	1.07	.53	27	1.95	1.17	.71
9	1.80	1.06	.48	28	2.29	1.17	.62
10	2.26	1.23	.81	29	2.42	1.14	.62
11	2.21	1.20	.72	30	2.06	1.18	.58
12	2.76	1.20	.67	31	1.80	1.04	.65
13	2.58	1.13	.73	32	1.64	.93	.72
14	2.85	1.11	.57	33	1.81	.99	.54
15	2.43	1.23	.72	34	1.45	.92	.74
16	2.48	1.16	.68	35	1.61	.95	.74
17	3.06	1.06	.64	36	1.64	.97	.64
18	2.74	1.15	.64	37	1.58	.95	.65
19	2.45	1.10	.50	38	2.34	1.40	.35
** Significant Level .01							

Appendix C

Table 4								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales (IS) samples (Pilot Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.35	.36	v1	.36	.57	v1	.76	.83
v2	.35	.34	v2	.52	.44	v2	.73	.84
v3	.39	.37	v3	.35	.58	v3	.72	.84
v4	.35	.33	v4	.38	.54	v4	.72	.84
v5	.35	.47						
Alpha for the sub-scale .45			Alpha for the sub-scale .61			Alpha for the sub-scale .87		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.51	.75	v1	.54	.46	v1	.59	.50
v2	.67	.57	v2	.52	.47	v2	.52	.54
v3	.58	.67	v3	.35	.72	v3	.47	.57
						v4	.35	.69
						v5	.36	.66
Alpha for the sub-scale .75			Alpha for the sub-scale .65			Alpha for the sub-scale .65		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.59	.67	v1	.66	.78	v1	.44	.64
v2	.54	.71	v2	.60	.79	v2	.47	.63
v3	.62	.62	v3	.60	.79	v3	.62	.58
			v4	.63	.78	v4	.59	.59
			v5	.61	.79	v5	.50	.62
						v6	.35	.79
Alpha for the sub-scale .75			Alpha for the sub-scale .82			Alpha for the sub-scale .73		
** Significant Level .01								

Appendix D

Table 1 Item Analysis of the Constraint Scale Male & Female (ES) samples (Main Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.55	1.01	.35	20	1.92	1.01	.57
2	1.37	.74	.36	21	2.01	.96	.64
3	1.57	.78	.36	22	1.98	.95	.50
4	2.46	.97	.35	23	1.65	.92	.46
5	1.77	.95	.35	24	1.41	.73	.38
6	1.75	1.02	.46	25	1.50	.85	.58
7	1.59	.97	.47	26	1.73	.91	.71
8	1.71	.89	.35	27	1.70	.91	.67
9	1.65	.88	.36	28	1.80	.95	.62
10	2.12	.98	.58	29	1.83	.90	.53
11	1.89	.96	.57	30	1.90	.98	.67
12	2.12	.98	.56	31	1.74	.94	.64
13	2.18	.97	.50	32	1.71	.94	.70
14	1.56	.90	.38	33	1.84	.98	.51
15	1.64	.94	.50	34	1.41	.82	.35
16	1.76	.95	.48	35	1.65	.90	.44
17	1.80	.93	.53	36	1.67	.88	.40
18	2.25	1.01	.41	37	1.31	.66	.35
19	1.89	.94	.58	38	1.78	1.07	.35
** Significant Level .01							

Appendix D

Table 2 Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales Male & Female (ES) samples (Main Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.43	.40	v1	.55	.55	v1	.70	.81
v2	.35	.47	v2	.57	.54	v2	.68	.81
v3	.41	.44	v3	.35	.70	v3	.71	.80
v4	.35	.57	v4	.44	.62	v4	.67	.82
v5	.35	.54						
Alpha for the sub-scale .56			Alpha for the sub-scale .67			Alpha for the sub-scale .85		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.45	.75	v1	.66	.71	v1	.67	.70
v2	.64	.54	v2	.58	.80	v2	.68	.69
v3	.57	.61	v3	.70	.67	v3	.59	.73
						v4	.45	.77
						v5	.39	.79
Alpha for the sub-scale .73			Alpha for the sub-scale .80			Alpha for the sub-scale .77		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.65	.85	v1	.75	.84	v1	.50	.61
v2	.82	.70	v2	.58	.88	v2	.44	.64
v3	.70	.81	v3	.78	.84	v3	.59	.58
			v4	.70	.86	v4	.51	.61
			v5	.77	.84	v5	.35	.68
						v6	.35	.73
Alpha for the sub-scale .85			Alpha for the sub-scale .88			Alpha for the sub-scale .69		
** Significant Level .01								

Appendix D

Table 3 Item Analysis of the Constraint Scale Male (ES) samples (Main Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.40	1.05	.37	20	1.87	.99	.57
2	1.35	.70	.36	21	1.93	.92	.61
3	1.56	.76	.38	22	1.93	.96	.50
4	2.32	.97	.35	23	1.57	.90	.48
5	1.71	.93	.35	24	1.48	.77	.53
6	1.68	1.04	.57	25	1.60	.93	.66
7	1.53	.97	.57	26	1.80	.92	.75
8	1.71	.87	.46	27	1.75	.93	.69
9	1.69	.93	.43	28	1.67	.91	.64
10	1.94	.95	.69	29	1.86	.90	.58
11	1.84	.94	.67	30	1.70	.92	.68
12	2.09	.96	.69	31	1.65	.91	.67
13	2.07	.99	.58	32	1.57	.84	.69
14	1.64	.99	.50	33	1.83	1.02	.56
15	1.70	.97	.55	34	1.44	.83	.49
16	1.74	.90	.56	35	1.70	.97	.50
17	1.80	.93	.52	36	1.63	.88	.43
18	2.26	1.03	.49	37	1.31	.67	.35
19	1.92	.93	.62	38	1.83	1.10	.35
** Significant Level .01							

Appendix D

Table 4								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales								
Male (ES) samples (Main Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.41	.42	v1	.59	.60	v1	.73	.83
v2	.35	.48	v2	.58	.61	v2	.72	.83
v3	.44	.43	v3	.37	.73	v3	.76	.81
v4	.35	.57	v4	.50	.66	v4	.68	.85
v5	.35	.54						
Alpha for the sub-scale .57			Alpha for the sub-scale .71			Alpha for the sub-scale .87		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.49	.74	v1	.63	.73	v1	.64	.72
v2	.62	.58	v2	.58	.79	v2	.63	.73
v3	.58	.63	v3	.72	.64	v3	.59	.74
						v4	.47	.78
						v5	.51	.77
Alpha for the sub-scale .74			Alpha for the sub-scale .80			Alpha for the sub-scale .79		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.65	.84	v1	.74	.84	v1	.51	.63
v2	.81	.69	v2	.59	.88	v2	.49	.64
v3	.68	.82	v3	.77	.84	v3	.60	.60
			v4	.70	.85	v4	.53	.63
			v5	.75	.84	v5	.35	.70
						v6	.35	.74
Alpha for the sub-scale .84			Alpha for the sub-scale .88			Alpha for the sub-scale .70		
** Significant Level .01								

Appendix D

<p style="text-align: center;">Table 5 Item Analysis of the Constraint Scale Female (ES) samples (Main Study)</p>							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.69	.94	.35	20	1.96	1.03	.63
2	1.38	.77	.51	21	2.10	1.00	.71
3	1.58	.80	.45	22	2.03	.93	.58
4	2.60	.95	.35	23	1.74	.94	.50
5	1.84	.96	.35	24	1.34	.69	.41
6	1.82	1.00	.46	25	1.40	.75	.62
7	1.65	.98	.46	26	1.67	.90	.72
8	1.71	.91	.36	27	1.65	.89	.70
9	1.62	.83	.38	28	1.93	.98	.64
10	2.31	.98	.59	29	1.80	.90	.58
11	1.93	.97	.56	30	2.09	1.01	.69
12	2.15	1.00	.53	31	1.82	.96	.69
13	2.30	.93	.52	32	1.85	1.00	.75
14	1.48	.79	.39	33	1.85	.95	.56
15	1.58	.91	.58	34	1.39	.81	.35
16	1.78	.99	.52	35	1.60	.83	.48
17	1.79	.94	.60	36	1.71	.89	.46
18	2.23	.99	.42	37	1.31	.66	.36
19	1.86	.94	.60	38	1.72	1.03	.35
** Significant Level .01							

Appendix D

Table 6								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales								
Female (ES) samples (Main Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.43	.38	v1	.50	.49	v1	.69	.78
v2	.37	.43	v2	.55	.45	v2	.65	.80
v3	.39	.42	v3	.35	.68	v3	.67	.79
v4	.35	.57	v4	.38	.58	v4	.66	.80
v5	.36	.54						
Alpha for the sub-scale .54			Alpha for the sub-scale .62			Alpha for the sub-scale .83		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.42	.78	v1	.69	.68	v1	.71	.67
v2	.66	.50	v2	.58	.80	v2	.74	.66
v3	.59	.59	v3	.67	.70	v3	.60	.72
						v4	.42	.78
						v5	.36	.80
Alpha for the sub-scale .72			Alpha for the sub-scale .80			Alpha for the sub-scale .76		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.66	.87	v1	.74	.85	v1	.50	.60
v2	.83	.71	v2	.60	.88	v2	.39	.64
v3	.74	.80	v3	.78	.84	v3	.59	.57
			v4	.69	.86	v4	.51	.59
			v5	.78	.84	v5	.37	.65
						v6	.35	.73
Alpha for the sub-scale .86			Alpha for the sub-scale .88			Alpha for the sub-scale .68		
** Significant Level .01								

Appendix D

Table 7 Item Analysis of the Constraint Scale Male & Female (IS) samples (Main Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.44	.97	.35	20	2.40	1.23	.53
2	1.53	.87	.35	21	2.16	1.13	.58
3	1.16	.50	.36	22	2.02	1.07	.46
4	1.46	.77	.35	23	2.12	1.18	.35
5	2.22	1.09	.35	24	2.31	1.20	.35
6	1.64	.97	.43	25	1.89	1.02	.44
7	1.72	1.04	.39	26	2.17	1.05	.47
8	1.87	.98	.36	27	1.92	1.02	.47
9	1.86	1.10	.35	28	2.18	1.11	.55
10	2.20	1.13	.44	29	2.40	1.18	.48
11	2.11	1.10	.50	30	2.05	1.12	.43
12	2.95	1.10	.58	31	1.91	1.06	.56
13	2.71	1.08	.53	32	1.66	1.00	.44
14	2.73	1.21	.41	33	1.93	1.02	.52
15	2.46	1.22	.51	34	1.36	.84	.35
16	2.56	1.17	.45	35	1.71	.96	.50
17	2.86	1.07	.38	36	1.68	.95	.48
18	2.60	1.09	.36	37	1.55	.91	.35
19	2.37	1.05	.36	38	2.18	1.36	.35
** Significant Level .01							

Appendix D

Table 8								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales								
Male & Female (IS) samples (Main Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.35	.47	v1	.53	.53	v1	.57	.75
v2	.36	.41	v2	.51	.54	v2	.60	.73
v3	.36	.44	v3	.37	.64	v3	.65	.71
v4	.39	.39	v4	.38	.64	v4	.57	.75
v5	.35	.55						
Alpha for the sub-scale .55			Alpha for the sub-scale .66			Alpha for the sub-scale .79		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.51	.68	v1	.42	.59	v1	.48	.59
v2	.63	.54	v2	.47	.51	v2	.58	.54
v3	.50	.69	v3	.46	.53	v3	.52	.57
						v4	.35	.68
						v5	.36	.67
Alpha for the sub-scale .72			Alpha for the sub-scale .64			Alpha for the sub-scale .67		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.58	.71	v1	.64	.72	v1	.40	.54
v2	.62	.69	v2	.45	.78	v2	.36	.57
v3	.60	.69	v3	.58	.74	v3	.56	.47
			v4	.62	.73	v4	.54	.48
			v5	.53	.76	v5	.35	.59
						v6	.35	.70
Alpha for the sub-scale .77			Alpha for the sub-scale .79			Alpha for the sub-scale .64		
** Significant Level .01								

Appendix D

Table 9 Item Analysis of the Constraint Scale Male (IS) samples (Main Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.51	.96	.36	20	2.21	1.15	.51
2	1.71	.96	.43	21	2.04	1.02	.52
3	1.24	.63	.46	22	1.91	.98	.46
4	1.57	.83	.38	23	2.14	1.14	.39
5	2.18	.98	.35	24	1.81	.97	.36
6	1.44	.55	.47	25	1.61	.86	.45
7	1.64	1.01	.48	26	1.98	.94	.48
8	1.91	.95	.36	27	1.84	.96	.53
9	1.66	.99	.36	28	2.03	1.05	.59
10	2.26	1.07	.41	29	2.32	1.09	.49
11	2.20	1.05	.54	30	2.05	1.07	.49
12	2.99	1.05	.56	31	1.86	1.01	.59
13	2.70	1.04	.59	32	1.76	1.02	.55
14	2.65	1.15	.40	33	1.90	.96	.57
15	2.35	1.17	.55	34	1.45	.91	.42
16	2.42	1.13	.47	35	1.55	.84	.49
17	2.73	1.00	.36	36	1.61	.86	.46
18	2.63	1.03	.37	37	1.59	.88	.35
19	2.37	.97	.44	38	2.07	1.30	.35
** Significant Level .01							

Appendix D

Table 10								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales								
Male (IS) samples (Main Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.36	.44	v1	.46	.47	v1	.52	.75
v2	.42	.37	v2	.48	.45	v2	.56	.73
v3	.36	.46	v3	.35	.62	v3	.63	.69
v4	.38	.40	v4	.36	.56	v4	.60	.70
v5	.35	.60						
Alpha for the sub-scale .54			Alpha for the sub-scale .60			Alpha for the sub-scale .77		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.48	.66	v1	.34	.65	v1	.49	.56
v2	.58	.53	v2	.48	.45	v2	.52	.55
v3	.50	.64	v3	.48	.45	v3	.46	.58
						v4	.36	.64
						v5	.35	.66
Alpha for the sub-scale .70			Alpha for the sub-scale .62			Alpha for the sub-scale .65		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.56	.68	v1	.62	.74	v1	.36	.55
v2	.61	.63	v2	.48	.78	v2	.42	.52
v3	.56	.69	v3	.59	.75	v3	.52	.48
			v4	.61	.74	v4	.46	.51
			v5	.57	.76	v5	.36	.59
						v6	.35	.67
Alpha for the sub-scale .75			Alpha for the sub-scale .79			Alpha for the sub-scale .63		
** Significant Level .01								

Appendix D

Table 11 Item Analysis of the Constraint Scale Female (IS) samples (Main Study)							
Item	Mean	Std	Item-Total Correlation	Item	Mean	Std	Item-Total Correlation
1	2.38	.97	.36	20	2.57	1.28	.64
2	1.36	.74	.35	21	2.27	1.22	.68
3	1.09	.31	.36	22	2.11	1.13	.54
4	1.35	.69	.35	23	2.09	1.23	.36
5	2.26	1.19	.35	24	2.78	1.21	.36
6	1.83	1.04	.48	25	2.16	1.09	.51
7	1.79	1.07	.46	26	2.36	1.12	.52
8	1.84	1.00	.39	27	2.00	1.08	.54
9	2.05	1.17	.36	28	2.32	1.15	.58
10	2.14	1.19	.60	29	2.48	1.25	.59
11	2.03	1.15	.61	30	2.04	1.17	.50
12	2.91	1.14	.58	31	1.96	1.11	.60
13	2.72	1.13	.56	32	1.55	.97	.46
14	2.82	1.27	.53	33	1.95	1.06	.57
15	2.57	1.25	.59	34	1.27	.76	.35
16	2.69	1.20	.55	35	1.87	1.04	.59
17	2.98	1.13	.47	36	1.74	1.02	.58
18	2.57	1.14	.43	37	1.52	.94	.35
19	2.37	1.13	.39	38	2.28	1.40	.35
** Significant Level .01							

Appendix D

Table 12								
Item-total Correlations and Internal consistency Reliability of the Constraints Sub-scales								
Female (IS) samples (Main Study)								
Lack of time			Lack of interest			Lack of money		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.35	.48	v1	.57	.57	v1	.62	.75
v2	.35	.44	v2	.52	.60	v2	.64	.74
v3	.39	.41	v3	.46	.64	v3	.66	.73
v4	.38	.39	v4	.37	.70	v4	.55	.78
v5	.35	.44						
Alpha for the sub-scale .55			Alpha for the sub-scale .69			Alpha for the sub-scale .80		
Transportation			Lack of facilities			Social (lack of partner)		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.53	.69	v1	.48	.54	v1	.45	.60
v2	.66	.53	v2	.47	.55	v2	.61	.53
v3	.50	.72	v3	.44	.59	v3	.55	.56
						v4	.35	.68
						v5	.35	.68
Alpha for the sub-scale .73			Alpha for the sub-scale .65			Alpha for the sub-scale .67		
Unawareness			Lack of skill/ability			Health/fitness		
Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted	Items	Item total correlations	Alpha if item deleted
v1	.58	.72	v1	.67	.71	v1	.43	.53
v2	.61	.68	v2	.42	.79	v2	.35	.59
v3	.62	.67	v3	.58	.74	v3	.58	.47
			v4	.62	.72	v4	.59	.46
			v5	.54	.75	v5	.35	.59
						v6	.35	.72
Alpha for the sub-scale .76			Alpha for the sub-scale .79			Alpha for the sub-scale .64		
** Significant Level .01								