

CHAPTER 3

METHODOLOGY

3.0. Introduction

This is a survey study designed to find out the extent of leisure perceptions and participation in various leisure activities by school adolescents in Libya. It is assumed that the extent of their participation in various leisure activities is a result of their desire for participation and their perceptions of benefits and constraints of leisure participation. Therefore, it examines the relationship of adolescents' perceptions of those benefits and constraints with their actual participation in certain selected leisure activities. The relationships between variables such as gender, grade levels age, and fathers' education and occupation are also investigated. The study used the survey technique and a questionnaire is used to collect data. Details of the sample, the instrument and procedure are presented.

3.1 The Sample

The subjects of this study comprised 1342 students whose ages ranged from 15 to 18 years (from Form 1 to Form 3). Subjects were selected at random from 28 high schools in the city centre of Tripoli, the Capital city of Libya. The city of Tripoli was selected because leisure facilities and opportunities are plentiful and available to students who wish to take part in leisure activities.

The sample comprised 48.1% male (n= 646) and 51.9% (n= 696) female school adolescents.

It was fairly evenly distributed among grade levels i.e. Form 1 = 32.6% (n= 437); Form 2 = 33.5% (n=450) ; and Form 3 =33.9% (n=455).

With regard to their fathers' education, 43.4% (n= 583) of the students had fathers with a university degree and a higher percentage 49.3% (n= 663) of them were those students whose fathers were professionals. Table 3. 1 shows distribution of the sample according to gender and age. of the respondents while Table 3.2 shows distribution of the sample according to heir father's education and occupation.

Table 3.1

Distribution of Subjects according to Age and Grade Levels

		Male	Female	Total
Form I	%	33.9	31.3	32.6
	N	(219)	(218)	(437)

Form II	%	32.8	34.2	33.5
	N	(212)	(238)	(450)

Form III	%	33.3	34.5	33.9
	N	(215)	(240)	(455)

Table 3.2

Distribution of Sample According to Father's Levels of Education and
Occupation

	N	%
Level of Education		
No formal schooling	61	4.5
Primary school	104	7.7
Secondary school	219	16.3
High school	375	27.9
University level	583	43.5
Total	1342	100
Level of Occupation		
Professional	663	49.3
Technician, clerical and other skill worker.	566	42.2
Semi-skilled and unskilled worker	114	8.5
Total	1342	100

3.2. Instrument

The instrument used in this study was adapted from the published studies related to leisure perceptions and participation. As in previous research pertaining to leisure participation had been carried out in Libya, the list of adolescents' leisure activities and items of leisure constraints and leisure benefits, were selected from studies carried out in other countries especially in the developed industrialised world namely the United States, Canada, Europe, Australia and New Zealand (e.g. Garton and Pratt 1991; Driver, Brown, and Peterson, 1991, Edginton, Jordan, DeGraaf and Edginton, 1995; Kelly, 1990; Dumazedier, 1973). However, the classification of fathers' educational levels and occupational status was based on the groupings used in the Libyan Bureau of Statistics.

A questionnaire which contains 5 parts was designed to obtain information on: (a) adolescents' participation in leisure activities; (b) perception of constraints and benefits of leisure activities; (c) demographic details such as school grades, gender, SES; (d) the hours spent on leisure activities; (e) the days on which adolescents spent more time in leisure; (f) where and with whom the adolescents spent time during leisure and (g) adolescents' perception of the desire for leisure activities.

Part 1 of the questionnaire includes demographic variables like age and gender of the subjects and their father's education level and occupational status. Multiple-choice items are used to obtain the information.

Part 2 of the questionnaire consists of 14 active and 13 passive leisure activities (Table 3.3).

The grouping and selection of activities was devised purely for the purpose of analysis in this study.

The 14 active leisure activities are divided into two categories. The first category consists of 7 vigorous leisure activities: football, basketball, volleyball, table tennis and handball, gymnastic and running. The second category comprises 7 non-vigorous leisure activities: swimming, walking, exercise, visiting parks, picnic, boy/girl scout, and gardening.

The 13 passive leisure activities were also divided into two categories. The first category includes 6 electronic media related audio-visual leisure activities i.e. watching television, watching movies, playing computer games, listening to music, playing music, and watching sports and games. The second category consists of 7 printed-media related and socially significant activities such as reading newspapers and magazines, reading books for pleasure, playing cards, loitering, spending time with friends, spending time with family and visiting relatives.

Respondents were asked to indicate on 5-point Likert scale to indicate the number days in a week they participated in the given leisure activities. The responses ranged from (1) "not even a day" to (5) "four days or more in a week". This measure of participation which is based on days of the week as a reference of the extent of participation was considered to be significant. It was assumed that respondents may have no difficulty in recalling the frequency of their participation on days of a week while using one month or one year reference of participation was considered inappropriate as students may not recalled the frequency of their participation over longer periods of time, however, the one month and one year reference of

participation had been used in the majority of previous studies that used ordinal measures of frequency of sports and leisure participation (e.g., Howard & Crompton, 1984; Garton and Pratt, 1987).

Part 3 of the questionnaire posed 6 questions. Five of these questions were multiple-choice items. Respondents were asked to indicate (1) the days of the week on which they spent more time in leisure activities; (2) the places where they spent more time for leisure; (3) the people with whom they spent most time for leisure; (4) the facilities which they usually used more often in leisure; (5) average numbers of hours they spent in sports, in watching television and in reading books. The purpose of these questions was to have a clearer and detailed idea about the intensity of adolescents' participation in active and passive leisure activities, measured by the number of hours spent in each given activity, (See Appendix B, Part 3).

The intensity of the "desire for leisure participation" was measured by a 5-point Likert scale ranging from (1) "no desire "; (2) "desire for one day in a week"; (3) "desire for two days in a week"; (4) "desire for three days in a week; and (5) "desire for four days or more in a week". The desire for types of activities was ascertained by the following items: "desire for sport activities", "desire for picnic", "desire for scout movement", and "desire for watching TV", "desire for music" and "desire for reading for pleasure". The first three items was considered as a desire for active leisure participation, while the other three item were considered as a desire for passive leisure participation. The desire variable was used in the model of the study as an important predictor of participation in leisure activity along with the perception of the benefits of leisure. (see Appendix B. Part 3).

Part 4 of the questionnaire consisted of 12 items on leisure constraints. The 12 items of leisure constraints were categorised into three categories:

- (a) 4 items for school constraints which include (i) lack of school facilities, (ii) too many school assignments, (iii) lack of organisation of out of school activities, and (iv) lack of encouragement from teachers);
- (b) 4 items for family constraints which include (i) lack of encouragement from parents, (ii) no home facilities, (iii) lack of transportation, (iv) busy with family business); and
- (c) 4 items for personal constraints which include (i) physically unable to participate, (ii) not aware of leisure places, (iii) leisure activities disturb academic study, (iv) religious beliefs. (See Appendix A, part 4). Constraints were investigated in relation to actual participation in leisure activities per week by such indicators as desire for participation, gender and SES. Respondents were asked to indicate their agreement or disagreement of each of the 12 constraint statements as a limiting or prohibiting factor for their participation in leisure activities; or as a reason for their non-participation, using a 5-point Likert scale ranking from (1) strongly disagree (5) to strongly agree. (See Appendix B, part 4).

Part 5 of the questionnaire consisted of 24 items on leisure benefits, measured by a 5-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". The respondents were asked to indicate their agreement and disagreement with each of the 24 items which were divided into four categories, each comprising 6 items.

Table 3.3

Classification of Active and Passive Leisure Activities

Active Leisure Activities		Passive Leisure Activities	
<u>Vigorous</u>	<u>Non-vigorous</u>	<u>Audio visual</u>	<u>Printed & social</u>
(1) football	(1) swimming	(1) watching TV	(1) reading newspaper
(2) basketball	(2) walking	(2) watching movie	(2) reading pleasure book
(3) volley ball	(3) exercise	(3) computer game	(3) playing cards
(4) table tennis	(4) visiting par	(4) listening to music	(4) loitering
(5) hand ball	(5) picnic	(5) play music	(5) spent time with friends
(6) gymnastic	(6) boy/girl scout	(6) watch sport and games	(6) spent time with family
(7) running	(7) gardening	(7) visiting relatives	

The first category was related to physical benefits which included (i) physical fitness, (ii) weight control, (iii) physical development, (iv) motivation for lifelong participation, (v) maintenance of good health, and (vi) reduction of physical illness.

The second category was related to social benefits which included (i) encourage contact with friends, (ii) provide opportunity to make friends, (iii) learn how to cooperate as a member of the group, (iv) get new experience from others, (v) overcome a sense of isolation and (vi) change the every day-routine.

The third category was related to psychological benefits which included (i) enjoy and relax, (ii) understand benefits of leisure, (iii) reinforce self-confidence and self-image, (iv) develop skills, (v) learn self-reliance and (vi) feel for self-expression.

The fourth category was related to learning benefits which included (i) learn about matters related to school subjects, (ii) encourage participation in school activities, (iii) add new knowledge about leisure, (iv) discover links between study and leisure, (v) enhance knowledge and culture; and (vi) give mind a rest from study fatigue. (See Appendix B. Part 5)

3.2 Administration of the Instrument

Following procedure was observed for administration of the instrument. After the research proposal was approved by the Faculty of Education Higher Degree Committee, University of Malaya, permission was sought from the Research Division of Libyan Secretariat of Education and the Faculty of Applied Social Science in El Fateh University in Tripoli, Libya, to carry out this research in 28 selected high schools in the city Tripoli. On receiving permission, this researcher made preliminary visits to each of the 28 schools concerned to explain to the principals and teachers the purpose of the study and to make arrangements for collecting data from the subjects. Information such as the numbers of students in Forms 1, 2 and 3 classes and the general background data of students' leisure participation in and out of the school like where, how, and with whom they spent their leisure time were also gathered.

The questionnaire was translated into the Arabic language and then translated back into English by two bilingual Libyan teachers in order to ensure its accuracy and

to increase reliability which was further ascertained by holding discussions with post-graduate students and teachers interested in the field of sports and students' participation in leisure activities in general and in Libya in particular.

Each part of the questionnaire was subjected to the opinions of the university scholars. A number of scholars at the Faculty of Education University Malaya as well as at the University of Applied Social Sciences at Tripoli specialized in the field of research in social and physical sciences examined the draft questionnaire. After the instrument was better refined and retranslated into Arabic, a pilot test of the questionnaire was carried out on 17 Libyan High School Students of 15 to 18 year age and studying at the Libyan School in Kuala Lumpur. These students were asked to indicate if any questions appeared ambiguous to them. After they had answered the questionnaire, they were interviewed in order to determine whether the instructions and the activities included in the questionnaire were clear and free from any ambiguity. The majority of these students indicated that they had no difficulty in understanding and answering all the items in the questionnaire. However, only 4 out of 17 students especially the younger ones did not fill in the items related to psychological benefits of leisure because they did not fully comprehend the implications of the items. The instrument was then finalized and its translated version was revised before it was administered in to the subjects.

The data were collected the researcher with the help of selected school teachers and school social workers from each school. A total of 1400 questionnaires were distributed at 28 schools over a period of 25 days, starting one month before the schools final examination at the schools. During the process of data collection, the

questionnaires were distributed for the subjects in their own classes by the researcher under the supervision of their teachers and with the help of the social workers. The teachers explained to the subjects the importance of the study, and asked for their cooperation. They were also of the need to be honest in answering the questions, and gave them assurance of strict anonymity and confidentiality of their answers. They were also given instructions to respect the privacy of others during the time of answering the questions and to remain quiet until they completed their questionnaire. The social workers then collected the questionnaires. The researcher thanked all participants, including teachers and social workers for their full cooperation. Only 58 out of 1400 responses were eliminated from the analysis because these were either incomplete, defaced or showed evidence of a marked bias. Thus, 1342 or 95.85% questionnaires responses were analysed.

3.4 Validity and Reliability of Leisure Constraints

To examine the perceptions of leisure constraints among school adolescents, a 10-item Likert-type scale was used. Items for this scale were selected from the theories advanced by Rymore and Godbey (1994), and Hultsman (1993). Only items representing school constraints, family constraints and personal constraints were selected for inclusion in the study because of their relevance to school adolescents. Students were asked to indicate their agreement or disagreement on each of the given constraint as a reason for their not participating in their desired leisure activities. To validate the scale, a principal component analysis was first performed in order to examine the factor structure of constraints scale. Secondly, factor loading was

estimated. Thirdly, Kaiser's (1960) criterion was applied to decide on the number of factors to be retained. Only those components with an eigenvalue greater than 1.0 were retained. However, the results indicated that two of the items failed to distinctively load on one of the three factors. The two items which yielded the problem of factorial complexity were abandoned from further analysis and interpretations, therefore only 10 items were used to measure leisure constrains.

Finally, to estimate the reliability of the retained factors, the study used Cronbach's alpha procedure. The Cronbach's alpha scores were computed to be for family constraints (.53), for school constrain (.77), and for personal constraints (.45) respectively (See Table 3.4).

The results of the empirical analysis were not inconsistent with the expectation that the 10 constructed item scale measures three perceived constraint-related factors (Table 3.4). The three factors which jointly and substantially explained the variability of the students' responses to the 10-item scale, account for about 53% of the total variance. The eigenvalue for the first three factors, 2.55, 1.65, and 1.10 respectively, met the Kaiser's criterion on the number of factors to be retained, and therefore verified the presence of the three underlying factors.

Table 3.4 summarized the distribution of factor loadings across the 10-item scale. The first factor was significantly loaded a four items. These items were "parents do not encourage" (.494), "too busy with family business" (.556), "lack of transportation" (.712), and "house is far from leisure facilities" (.756). These four items, which suggested elements of constraints of leisure participation, reflected the dimension of family-related constraints. The second retained factor was significantly

loaded with items that represent school-related constraints. They are, "too many school assignment" (-.809), "school does not organize out of school activities" (-.855), "teachers do not encourage" (-.792) reflected the underlying factor. Finally, the third factor was loaded with the last three items on the scale that implied personal-related constraints. These items are, "physically not able to participate" (.704), "do not know where the facilities are" (.623), and "religious beliefs do not allow me to participate" (.714).

3.5. Validity and Reliability of Leisure Benefits

To investigate perception of leisure benefits, a 24-item Likert type scale was used. The items were selected from Driver (1991). The present study covers 4 categories of leisure benefits, namely, physical benefits, psychological benefits, social benefits and learning benefits which were represented by 6 items in each category. To validate the scale, first the principal component analysis was conducted on the correlation matrix of the 24 items of leisure benefits. Second, factor loadings were estimated. Third, Kaiser's criterion was applied to decide on the number of items to be retained. Fourth, to estimate the reliability of the retained factor, the study used Cronbach's alpha procedure. The Cronbach' alpha was computed for physical factors as (.76), psychological factors as (.75), social factors as (.73) and learning factors as (.50) (See Table 3.5).

Table 3.4

Loadings for Three-Factor Solution

Items	Perception of Constraints		
	Family	School	Personal
1. Too many school assignment	.177	-.809*	.139
2. School does not organize out of school activities.	.124	-.855*	.094
3. Teachers do not encourage	.159	-.792*	-.002
4. Parents do not encourage	.494*	-.228	.221
5. House is far from leisure facilities	.756*	-.209	.274
6. Lack of transportation	.712*	-.197	.050
7. Too busy with family business	.556*	.083	-.050
8. Physically not able to participate	.142	-.053	.704*
9. Do not know where the facilities are.	.404	-.151	.623*
10. Religious beliefs do not allow me to participate.	.016	-.033	.714*
Cronbach's Alpha	.53	.77	.45

* Statistically significant at $\alpha = .05$

The results of the empirical analysis showed that there were 4 underlying dimensions measured by the students' responses to the 16 items (Table 3.5) and these account for 56% of the total variance.

Of the 24 items included in the analysis, 8 of them found to be problematic, were they produced factorial complexity and inconsistency with the other items. Therefore, these items were excluded from any further analysis and interpretation, leaving a total of 16 items on the scale.

The variance for the first component with the largest eigenvalue was 5.461, while the subsequent eigenvalues were 1.446, 1.091, and 1.018. All estimated factor loadings of 1.0 and above were large enough to be significant, even the weakest loading (.568) was statistically significant at $p = .01$.

Table 3.5 summarizes the distribution of factor loadings across the 16-item scale. The first category was significantly loaded on four items; the items were "physical fitness" (.758), "weight control" (.763), "contribute to physical development" (.762), and "maintain good health" (.740). These 4 items reflected the dimension of physical benefits of leisure. The second retained category was significantly loaded on 4 items that represents psychological benefits of leisure, these items were "reinforcing self-confidence and self-image" (.760), "develop skills" (-.772), "learn self-reliance" (-.805), and "feeling of self-expression" (-.663). The third retained category was significantly loaded on 3 items that represents social benefits of leisure. The items are, "encourage contact with friends" (.827), "provide opportunity to make friends" (.840), and "learning how to cooperate with a group" (.767). The fourth was loaded with the last 5 items on the scale that implied learning benefits of leisure. These were "encourage participation in school activities" (.619), "add new knowledge about leisure" (.568), "Discover link between study and leisure" (.710), "enhance knowledge and culture" (.695), and "give mind rest after study fatigue" (.638).

Table 3.5

Loadings for Rotated Four-Factor Solution

Items	Leisure Benefits			
	Physical	Psychologica l	Socia l	Learning
1. Physical fitness	.758*	-.186	.235	.210
2. Weight control	.763*	-.293	.423	.293
3. Contribute to physical development	.762*	-.342	.447	.265
4. Maintain good health	.740*	-.441	.555	.310
5. Encourage contact with friends	.406	-.294	.827*	.263
6. Provide opportunities with friends	.342	-.245	.840*	.257
7. Learn how to cooperate in groups	.362	-.370	.767*	.311
8. Reinforcing self confidence and image	.439	.760*	.396	.342
9. Develop skills	.424	-.772*	.380	.322
10. Learn self-reliance	.332	-.805*	.430	.371
11. Feeling of self-expression	.122	-.663*	.257	.228
12. Encourage participation in school activities	.226	-.254	.181	.619*
13. Add new knowledge about leisure	.155	.021	.162	.568*
14. Discover link between study and leisure	.305	.323	.226	.710*
15. Enhance knowledge and culture	.225	-.447	.321	.695*
16. Give the mind a rest after study fatigue	.173	-.370	.282	.638*
Cronbach's alpha	.76	.75	.73	.50

* Statistically significant at alpha = .05