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**INVESTIGATION AND COMPARISON OF PSYCHOLOGICAL RELATION,  
MOTIVES, BARRIERS AND BEHAVIORAL INVOLVEMENT OF CONSUMERS OF  
GENERAL SPORT: EVALUATION BY THE FRAMEWORK OF PSYCHOLOGICAL  
CONTINUUM MODEL (PCM)**

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**ABSTRACT**

The research is aimed at investigating and comparing the psychological relation, motives, barriers and behavioral involvement of general sport's consumers through psychological continuum model (PCM). The Statistical society was selected from Yazd that 600 of them were as samples based on Cochran formula through unlimited and available society and also elected rationally, objectively. Data analysis calculated by SPSS ver22. The findings studied with regard to data analysis through questionnaire distribution in society and it indicated based on PCM that participants are leveled in four levels of awareness, attractiveness, dependence and loyalty in general sports. As it is shown that among 437 of total repliers to questionnaires, 92 (21%), 59 (13.5%), 184 (42%) and 102 (23.5%) were in awareness, attractiveness, dependence loyalty levels, respectively. The results of research based on Kruskal-Wallis test indicated that there is a meaningful difference between different level of psychological relation (awareness, attractiveness, dependence and loyalty) of consumers in general sport with regard to behavioral involvement, motive and barriers. The Total result is that moving from low level to high level of PCM of general sport's consumers shows barriers decrease and motive increase and causes psychological relation improvement and the rate of behavioral involvement will increase.

**Keywords: Consumers' behavior, general sport, PCM, motives, barriers**

## **INTRODUCTION**

Participation in sports has more benefits and the participants are considered as consumers. The consumers have different needs. On the one hand, the main aim of marketing is consumers' satisfaction. The marketers want to know consumers' needs. One of the important issues is the establishment of a psychological relation with sport which must be paid attention in studying consumers' behavior. Consumers' behavior is defined as the process of selection, purchasing, usage, non-use of products and services related to sports in order to meet needs and benefits from it. The psychological relation shows that how the individuals communicate with objects to show how their attitudes are made and changed indicating the behaviors as disposability activities. (Beaton et al, 2009).

General sport is equal to an English word (sports for all) and (public sports) and usually refers to sport activities which one does for recreation and without attention to its results –win or lose- In some references, the word (mass participation) is the synonym for general sport (saeedi, Heidari and Qadimi, 1390). In this study, the participants of general sport are selected among the persons with different sport skill participated in festivals, congress. Among several frameworks related to psychological relation

(like doing sport, scanlan et al, 1993) and psychological continuum model (PCM. Funk, 2008), the researchers divided the sport consumers into 4 groups (awareness, attractiveness, dependence and loyalty) based on the degree of their psychological relation. Funk and James (2001) developed PCM to understand the sponsors' relationship and sport consumers. PCM is used as a framework to organize the studies of different scientific majors in sport consumers' behavior and event back ground (Funk & James, 2001). This framework indicates watch, play and participation in ongoing activities of sport consumers during four total stages of hierarchy: awareness, attractiveness, dependence and loyalty. With regard to this issue that persistent participation in sport is important but there is no enough evidence why the individuals participate in sport continually.

Ongoing participation in sport is seen as final output or the result of inner process of sport consumers in leisure time (Hubbard and Mannell 2001, Loucks-Atkins and Mannell, 2007). On the other hand, motive factors, barriers of participation, sport involvement and psychological relation are as joint and requirements of output (Iwasaki and Hawitz, 2004, Kyle & Mowen, 2005).

Funk (2000), without regarding whether consumer is a visitor or a participant, indicated that more motive factors overlap (such as enjoyment, socialization) and developed sparing motive framework. This framework evaluates 5 motive groups: socialization, performance, excitement, esteem, and diversion. Funk (2008), Iso-Ahola (1980), Sloan (1985) emphasized that sparing motive scale is required for marketers, since the motive may be changed during consumers' life or be different time to time in order to participate in sport. Koo and Hardin (2008), Wann et al (2008), Won and Kitamura (2007) concluded that motives maybe changed based on emotional, sport and country dependence. The results of Monfarde, Tojari and Nikbakshsh (2014) indicated that the effect of internal and external constraints and motivators on sport consumption behavior is mediated by sport identification and sport attachment. Also consumption behavior was not affected by demographic characteristics of the spectators. Considering barriers, Crawford and Godbey (1987) introduced 3 dimensions of barriers in leisure activities including inner personal, intrapersonal and structural. Jung-Hwan (2012) used 7 factors of barriers (psychological, interest, time, equipment & facilities, availability, cost, and inner

personal) in his research and the findings showed that 2 limitations including psychological inner personal and interest are the important barriers from awareness level to higher level.

The results of Funk (2008)'s research indicated that ongoing and sequential participation is resulted from high degree of psychological relation. Nevertheless, the high degree of psychological relation is not a definite condition of high behavioral involvement. Jung-Hwan (2012), in his research on South Korean recreational golfers, estimated that there is a positive meaningful relationship between behavioral involvement and psychological relation. In other words, participation shows more behavioral involvement in higher level of psychological relation.

A few study has done on the role of psychological relation as on intermediate between 2 previous factors (motives and barriers) and individuals' behavior. In a multi-level framework, motive, barrier and psychological relation are considered as requirements of behavior (Alexandris et al, 2011). Although motives and barriers may be as requirements of psychological relation and the psychological relation may be the intermediate between the effects of these 2 factors on person's behavioral involvement.

Current study aims at investigating the conceptual model of psychological relation between motive, barriers, behavioral involvement and psychological relation variable of participants in Yazd.

The questions are: What are motives and barriers of participants in general sport?

What differences are between behavioral involvement, motives, and barriers of participants of general sport based on psychological relation levels (PCM)?

#### **Instruments and methods:**

##### **Design of methodology**

This research is descriptive-comparison because it describes the variables and compares parts of each variable.

Society: Samples and Sampling model.

The considered society is the participants of general sport who have been in divisional-sport Park, sport Saloon, general sport festivals, & walking convention. Because there is no exact statics about society, the sample size formula for unlimited society is used to determine statistical sample of

research and 600 individuals were selected, among whom 437 answered the questionnaire, in this research non-probability sampling is applied. The sampling includes rational, objective, judgmental and available sample.

The instrument of translated questionnaire is psychological relation of golfers of Howang (2012) including 4 sections (psychological relation, sport motives, barriers, and behavioral involvement).

##### **Validity and durability of instrument:**

To emphasize the justifiability and durability in smart-PLS Software, the alpha Cronbakh coefficient, Cr and factorial analysis coefficient are defined.

The obtained amounts related to 3 mentioned determinants are in Table (1) for dimensions of research model. As it is obvious, the numbers are in desirable level for all variables. These results show that designed assessment are suitable for research variables and the questionnaire is justified and durable.

**Table (1): AVE. CR.a Cron bakh**

Variables	AVE	CR	Alpha Cronback
Behavioral involvement	0.5904	0.7922	0.7655
Psychological relation	0.5368	0.8900	0.8559
Motives	0.5067	0.9556	0.9512
barriers	0.5101	0.9293	0.9218

#### **RESEARCH HYPOTHESES**

hypothesis 1: There is a significant difference between participants of PCM different levels in behavioral involvement.

hypothesis 2: There is a meaningful difference between participants of PCM different level in motives.

hypothesis 3: There is a meaningful difference for general sport between participants of PCM different level in present barriers.

**FINDINGS**

According to Data resulted from questionnaire distribution in studied society and based on PCM, participants grouped in four levels, awareness, attractiveness, dependence, and loyalty. 92 (21%),

59(13.5%), 184(42%) AND 102(23.5%) are in awareness, attractiveness, dependence and loyalty levels, respectively. Table (2) shows mean, and standard deviation of 3 factors of PCM for each level.

In table (4 and 5), the results from research hypothesis test have been shown based on Kruskal-Wallis test and meaningful levels. As it is shown, all research hypothesis have been confirmed.

**Table 2: Mean standard deviation of PCM level.**

Factors of PCM	PCM levels			
	awareness	attractiveness	dependence	loyalty
Enjoyment	3.496 (0.815)	5.412 (0.746)	5.103 (1.034)	6.516 (0.479)
Centrality	3.039 (0.882)	3.452 (0.917)	4.514 (1.006)	6.186 (0.605)
Symbol	3.192 (0.902)	3.598 (0.739)	5.021 (0.818)	6.352 (0.482)

**Table (3): Mean and standard deviation of research variables**

variable	mean	Component	standard deviation
Psychological relation	Enjoyment	5/51	1/59
	Centrality	4/70	1/52
	Symbol	4/97	1/51
Motives	socialization	5/32	1/63
	Performance	5/16	1/67
	Excitement	5/26	1/46
	Esteem	5/21	1/75
	diversion	5/28	1/48
	health	5/48	1/35
	fitness	5/43	1/38
	skill	5/51	1/86
Barriers	Psychological	2/57	1/39
	Interest	2/83	1/90
	Time	2/84	1/42
	Facilities	3/09	1/82
	Accessibility	3/19	1/55
	Cost	3/62	1/62
Behavioral involvement	interpersonal	3/01	1/60
	Activity in the week	2/19	1/06
	Sports history (month and year)	2/87	1/26
	Ability and skill	2/01	0/67

Table (4): the comparison of motives, barriers and behavioral involvement of general sport’s participants based on psychological relation levels WithKruskal-Wallis Test.

hypothesis	variable	Chi-Square	df	Asymp. Sig.	Confirmed the result of test
H1	Behavioral involvement	16.781	3	0.001	
H2	Motives	202.191	3	0.001	
H3	Barriers	29.550	3	0.001	

Table (5): Ranking in four groups based on the average Rating

Variable	Pcm	N	Average Rating
Behavioral involvement	awareness	91	196.34
	attractiveness	62	196.34
	dependence	181	224.69
	loyalty	103	252.76
Motives	awareness	91	85.84
	attractiveness	62	198.73
	dependence	181	222.33
	loyalty	103	342.99
Barriers	awareness	91	248.91
	attractiveness	62	242.29
	dependence	181	228.65
	loyalty	103	161.60

**DISCUSSION AND CONCLUSION**

The findings of research indicated the grouping of participants in 4 levels (PCM) from the highest number to the lowest number, it means in level 3 (dependence 42%, n=184), level 4 (loyalty 23.5%, n=102), level 1 (awareness 21%, n=92), and level 2 (attractiveness 13.5%, n=59), in other words, level 3 is psychological relation which correspond to findings (Beaton et al, 2009; Funk et al, 2011; Jung-Hwan, 2012).

Based on the results of Kruskal-Wallis in table (4). the sig is less than 1.5 for hypothesis (1), and so null hypothesis will be rejected which is about the equality among the mean of 4 groups. therefore, it will be determined that there is a meaningful difference between 4 PCM level regarding behavioral involvement. the hypothesis are

without direction in this test, it mean it just shows the difference and does not indicate the size of groups based on their mean. but based on the results of table (5), it can be claimed that the persons in Fourth PCM level (loyalty) are in higher level in comparison with other persons. In this study, the independence level in a Four-level group is based on the degree of psychological relation. So, the results of this research show the differences between low and high levels of psychological relation and behavioral involvement. General sport’s participants of loyalty level exercise 6 to 8 times in a week, but the participants of general sport in attractiveness level Train 1 to 2 times in a week. The findings of research correspond with the results of Iwaski&Howitz (2004), Funk and James (2001), Funk (2008) and

Howang (2012) and Ivan et al 2006, Funk et al (2011), Kail et al (2004), Cosper et al (2007), Joon and redinger (2009), Park and Kim (2000)'s researches.

Based on gained results shown in table (4), because the sig is less than started amount (%5), it can be concluded that there is a significant difference between the individual in 4 groups considering motive rate. Although it can be claimed based on the result of table (5) that the individuals in Fourth PCM level are in higher level of motive in comparison with other persons because the mean for this group of people has a considerable difference with other ones. Also, based on the results in table (5), it can be said that there is a significant difference between the persons of 4 groups regarding motive. Also, the results of research correspond with Howang (2012)'s findings showing all motive factors (9 factors) contribute in grouping of each 4 levels of psychological relation.

Funk (2008) indicates that each psychological level may relate to different motive factors and general sport motive will be a suitable structure in order to recognize different features of each level. for example, Funk expected that socialization is related to awareness level more, but self-esteem is correlated to attractiveness level. So,

understanding different motive factors of each psychological level is important to determine different characteristics of each level. Till now, only a PCM research investigated sport participants' motive factors involving in charity sport events (Filow, Funk and obrien, 2009). In addition their study about motive factors only emphasizes an dependence and attractiveness levels. This research investigates the relationship between motive factors and all 4 PCM levels. The researches correspond with present research of Howan (2011), Funk (2008), (Filow, Funk, obrien 2009).

Based on findings of table (4), the results made it obvious that all 7 barrier levels were important to investigate the relation with 4 PCM levels and there factors were necessary to understand different features of each level. Table (5) shows that for people in Fourth PCM level (loyalty), there are less barrier to participate in general sport. The findings of research correspond with the result of Tsai and Coleman (2010)'s research showing barriers have negative effects on psychological relation and Howang (2012)'s result indicating all 7 barriers factors are meaningful in investigating reciprocal relations with 4 PCM levels and there factors were necessary to understand different characteristics of each level. Beaten et al

found that showing how different kinds of barrier are different in 4 PCM level based on their severity and nature has practiced and theoretical importance (Beaten et al 2009, p. 22). Although Beaten et al (2009) hypothesized that barriers are more important in relation with 2 first levels (awareness & attractiveness) in comparison with 2 high levels (loyalty and dependence).

No research investigated barriers in all levels of psychological relation.

The results of research indicated that there is a meaningful difference between different levels of psychological relation of participants with regard to motive, it means the motives will increase when general sport participants move from low PCM levels to high PCM levels and improves psychological relation and so the behavioral involvement will increase.

The research divided consumers into 4 PCM levels through investigating their psychological relations, this study contributed in theories to consumers' behavior in diversion and sport. Also, These findings introduced a point of view about ongoing participation in general sport that may be useful for specialist. Findings showed that there has been a positive relationship between psychological relation and behavioral involvement. Sequential

participation may cause high psychological relation level. Therefore, the specialists have to identify participants and group them into high and low sequential levels, and establish central marketing techniques to their participation level. Finally, in order to understand the reason for ongoing participation, the specialists must know what a consumer requires and wants and why consumers select to participate in sport to meet their needs and wants. The result of research made it obvious that there are a meaningful and positive relationship between motives of general sport participation and psychological relation, a significant and positive relation between behavioral involvement and psychological relation, and Finally a negative and meaningful relationship between barriers of general sport and psychological relation. In other words, motive increase causes the decrease in barriers of stronger psychological relation and so the behavioral involvement of general sport will be increase.

The findings made obvious that there is significant difference between different levels of participants' psychological relation considering behavioral involvement, motive and barriers. frequent participation may cause higher psychological level. So, Specialists showed identify participants

group them in low and high levels and set marketing techniques centralized on their participation level. Finally, in order to understand frequent participation, the specialists should know that what a consumer need and wants and why participants have chosen to train in order to meet their wants and needs. The total result is that going toward higher PCM levels of general sport participants causes decrease in barriers increase in motive, psychological relation improvement, and increase in behavioral involvement. In other words, the psychological relation will be stronger through motive increase and barrier decrease and so the behavioral involvement of participation will increase in general sport.

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