



Journal of Education and Recreation Patterns (JERP)

www.jerpatterns.com

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To cite this article:

Kavlak, H.T. & Aksu, H.S. (2023). The effect of attitudes towards physical violence and demographic variables on serious leisure time activity choice. *Journal of Education and Recreation Patterns (JERP)*, 4 (2), 495-506. DOI: <https://doi.org/10.53016/jerp.v4i2.173>

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The Effect of Attitudes Towards Physical Violence and Demographic Variables on Serious Leisure Time Activity Choice

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ARTICLE INFORMATION

Original Research Paper

Received 20.08. 2023

Accepted 05.10. 2023

<https://jerpatterns.com>

December, 2023

Volume: 4, No: 2

Pages: 494-506

ABSTRACT

More than 1.6 million people worldwide lose their lives every year due to violence. This rate makes the phenomenon of violence one of the leading causes of death in the world and can become an element of pressure on both economic and social life. It is extremely important to evaluate the solution proposals for the phenomenon of violence from an interdisciplinary perspective. At this point, it is assumed that there is a relationship between serious leisure activities and violence. Based on this point, the aim of this relational survey research is to determine the extent to which individuals' gender, educational status, weekly participation in serious leisure time activities, and perceptions of violence affect the likelihood of preferring serious leisure time activities. A relationship survey model and a simple random sampling method were used in the study. According to the findings, participants' weekly participation time in serious leisure time activities and educational level are significant predictors of serious leisure time activity choice. On the other hand, a negative relationship was found between the activity duration of serious leisure-time participants and their perceptions of physical violence. As a result, it was revealed that the attitudes towards violence of individuals who participated in outdoor serious leisure time activities were at a lower level compared to individuals who participated in indoor serious leisure time activities.

Keywords: Indoor Recreation Activities, Outdoor Recreation Activities, Serious Leisure Activities, Violence



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INTRODUCTION

A human being is a social being. Due to its social characteristics, it forms various behavioral patterns and characters by being influenced by environmental factors, is constantly in a cycle of mental and emotional change, and thus can acquire different habits and hobbies. On the other hand, it should be stated that there is a mental functioning coded as "fight or flight" in human nature. As a matter of fact, this code was given to man as an autonomous behavior with his existence. Therefore, in addition to the environmental factors affecting behaviors, there is also an internal motivation factor (Porges, 1997). In other words, while it is said that people can exhibit violent behavior as a reaction to the events in their environment, it should be accepted that they can also show a tendency to violence completely internally. For this reason, it is thought that the emergence of violence comes with the existence of human beings. From a religious perspective, in Judaism, Christianity, and Islam, which are the most common religions in the world, it is stated that the first violence was between Abel and Cain, the two children of Adam and Eve, who are accepted as the first human beings (Blenkinsopp, 2011).

Violence is a social problem that cannot be eliminated even with 21st-century science, although it has been going on since the existence of humanity. This social problem is defined by the World Health Organization as "the actual intentional use of power or the actual intentional use of such power against oneself, another person, or a group or community that results in or is likely to result in injury, death, psychological harm, developmental delay, or deprivation" (WHO, 2022). As can be understood from the given definition of violence, there is a situation where a person consciously uses his or her own power. In other words, violence comes up on the agenda because of a mental process. There are also studies arguing that the predisposition to violence is genetic (Viding & Frith, 2006; Tharshini et al., 2021). The fact that violence is transmitted to the next generation through genes indicates that this phenomenon has been going on since the existence of mankind.

In addition to the starting point of violence, it is essential to reveal the individual and social effects of violence and to think about how this social problem can be eliminated or reduced. Throughout history, many measures have been taken to prevent violence. It is said that the first law in history that includes articles on the prevention of violence and bullying dates to the 24th century BC. This law, also known as the "Urukagina Law", was created by the Sumerians, who invented writing (Bilgiç, 1963). It is estimated that people living in communities before the Sumerians had some rules among themselves. Both the Urukagina and Hammurabi laws of ancient times and the 21st century laws include deterrent penalties such as fines and imprisonment as sanctions for violence and bullying (Duranoğlu, 2022). However, regardless of the sanctions, it is thought that the penalties are not sufficiently deterrent. The United Nations Children's Fund (UNICEF) states that one adolescent dies every seven minutes worldwide due to violence (2015) and that the rate of children aged 1–14 who are exposed to violence in any way is over 80% (UNICEF, 2022). The World Health Organization states that one in every three women is exposed to violence (WHO, 2018). Therefore, there is a need for more than punishments supported by laws to prevent violence. At this point, it is necessary to turn to practices that will minimize the aggression levels of individuals and reduce their tendency to violence.

The individual experiences a chemical cycle within his or her anatomical structure while deciding, implementing, or after implementing violent behavior. It is known that many hormones and neurotransmitters, such as serotonin, dopamine, oxytocin, testosterone, and endorphin, are effective in this chemical cycle. Therefore, the deficiency or excess of a hormone in the anatomical structure of an individual can affect their attitude towards violence. For example, an increase in testosterone, norepinephrine, and hypoglycemia in the anatomical structure increases the tendency towards violence. However, an increase in serotonin,

dopamine, and vasopressin gives calmness to the individual and decreases the level of aggression (Abay & Tulu, 2000).

Studies have shown that exercise regulates hormones (Civan et al., 2018), that physical activity has a positive effect on serotonin and dopamine (Terlemez, 2019), and that it affects testosterone hormone (Bhasin et al., 2001). Therefore, it can be stated that physical activity and exercise, which are also considered recreational activities, have a happy effect. Studies have also shown that participation in recreation reduces atypical behaviors such as violence and aggression (Yönet et al., 2016; Aksu & Varol, 2022; Berdychevsky et al., 2022).

The psychologist Spencer (1873) argued that individuals accumulate energy in their bodies under atypical behaviors such as violence, stress, aggression, and boredom. According to Spencer, who observed children, he argued that individuals can discharge the energy accumulated in their bodies through play and thus move away from the potential to perform atypical behaviors. This situation, called the Waste Energy Theory, emphasizes the importance of physical activity and recreation in the context of play (Evans & Pellegrini, 1997).

In recreation activities where individual skills can be developed as well as psychological well-being and distancing from atypical behaviors, the type and frequency of participation in the activity can also affect the degree of development of these psychological states and individual skills. At this point, it is necessary to draw attention to whether recreation activities are carried out randomly and infrequently or planned, regularly, and at certain intervals.

Stebbins, who has been pondering on this issue for more than 30 years, argues that individuals have three different time periods in recreation participation: serious, casual, and project-based, and puts forward the phenomenon of "Serious Leisure". According to Stebbins, serious leisure time is "the period of time spent systematically participating in and following the chosen activity in order to obtain a career related to amateur, hobby or volunteer activities that require special knowledge, skills and experience, are very important, interesting and satisfying" (Stebbins, 1982; 2011). Casual leisure time is defined as "a period of time spent on activities that require little or no special training, are relatively short in duration and provide instant gratification because they are intended to provide instant gratification" (Stebbins, 1997). Project-based leisure is defined as "short-term, reasonably complex, one-off or infrequent, but occasional leisure time or time spent on activities that take place at a time away from unpleasant obligations" (Stebbins, 2011). Stebbins (1982) focused more on serious leisure time and stated that serious leisure time differs from other leisure times with the following characteristics:

- Stability in the recreational activity that the individual is oriented towards,
- Recreational activities provide opportunities for professional development or acquiring a new profession.
- It requires personal effort to develop a range of skills.
- It helps the individual improve himself or herself.
- Serious leisure is a social construct with a distinct culture with its own values, beliefs, principles, and norms.
- To ensure that individuals adopt the activities and establish a strong bond with them.

When we look at the characteristics that distinguish serious leisure time from other leisure time periods, it is argued that the individual's tendency towards activity can increase, he or she can gain personal skills, take part in a new culture and value system, and engage in self-improving activities. The individual should stay in the flow and use his or her leisure time in a recreational sense rather than engaging in atypical behaviors. In the serious leisure period, the state of staying in the flow put forward by Csikszentmihalyi is in question. Because the individual stays in the flow by performing a series of activities that are continuous between the

difficulty level of the activity and personal skills (Nakamura & Csikszentmihalyi, 2009), If the individual stays in the flow and continues the activity, he or she can provide stability by avoiding atypical behaviors, continuing self-development, and meeting the need for self-actualization.

Based on the given information, the aim of this relational survey research is to determine the extent to which individuals' gender, educational status, weekly participation in serious leisure activities, and perceptions of violence affect the likelihood of preferring serious leisure activities. In this context, the following questions were sought in the research:

- Are individuals' attitudes towards violence effective in their choice of serious leisure activities?
- Are the variables of gender, educational status, and weekly participation time in serious leisure activities effective in the selection of leisure activities?
- What is the order of importance regarding the prediction level of predictor variables?

METHOD

Research Design

In this study, since it was aimed to determine to what extent the gender, educational status, weekly participation time in serious leisure time activities, and physical violence attitudes of individuals affect the possibility of choosing serious leisure time activities, the research was conducted according to the relational screening model, one of the quantitative research designs.

Population and Sample

The population of the research consists of Fitness centers and Nature clubs located in the central districts of Konya and Izmir (Türkiye). Google maps application was used to identify the fitness centers in the central districts of Konya (Meram, Selçuklu and Karatay). During the research process, 20 fitness centers and 6 nature clubs were identified. As a result of the interviews, it was determined that fitness centers had 3,721 members and nature clubs had 197 members. The same process was carried out again in Konak and Bornova districts, which are the central districts of Izmir. A total of 42 fitness centers and 14 nature clubs were identified in these districts. As a result of the interviews, it was determined that the total number of members of fitness centers was 7.013 and 579 people were members of nature clubs. When the sample of the research was calculated with 95% confidence interval and 5% margin of error formula, it was concluded that a sample size of 372 people would be sufficient for 11.510 subjects constituting the universe. Probability-based simple random sampling technique was used as the sampling method (Aslan, 2018). To identify individuals who regularly attend fitness centers and nature clubs, participants will be referred to as individuals who participate in serious indoor and outdoor leisure time activities in the rest of the article.

When the demographic information of the participants is analyzed, it is seen that 48.6% of the subjects are female and 51.2% are male, the most crowded group in the educational status variable is gathered in the group with a bachelor's degree or higher (34.4%), the number of subjects in the group participating in indoor and outdoor serious leisure time activities is almost half and the group allocating 3-4 hours as weekly participation time to these activities (30.1%) is predominant (Table 1).

Table 1. Findings Related to Participant Form

Variables	Groups	n	%
Gender	Woman	254	48.8
	Male	267	51.2
Education Status	Primary education	51	9.8
	Secondary Education	126	24.2
	Associate degree	165	31.7
	License and over	179	34.4
Serious Leisure Activity	Closed Area	263	50.5
	Open Space	258	49.5
	60-119	65	12.5
	120-179	111	21.3
Weekly Attendance Period	180-239	157	30.1
	240-299	102	19.6
	300 and over	104	16.5

Data Collection Tools & Process

The participant form created by the researchers was used as a data collection tool in the study, and the relevant form includes information about the gender, educational status, serious leisure time activity, and weekly participation time of the serious leisure time participants.

The data of the study were collected using the "Attitudes Towards Violence Scale," developed by Velicer et al. (1989), updated by Anderson et al. (2006), and adapted to Turkish by Özkan et al. (2018), ensuring its validity and reliability. The scale consists of 46 items and consists of "Intimate and Interpersonal Violence" (14 items), "Physical Violence" (10 items), "War Coded Violence" (11 items), "Punishment Coded Violence" (8 items), and "Other Violence" (3 items) sub-dimensions. The Likert-type scale has a 5-point scale. In the study adapted into Turkish by Özkan et al. (2018), the Cronbach's alpha reliability coefficient of the whole scale was determined to be 0.93. In this study, the Cronbach's alpha reliability coefficient was calculated at 0.95.

Data Analysis

The participant form and the related scale used in the study were approved by the ethics commission of "Selçuk University" with the decision number "01.03.2022-244569". The participant form and the related scale were obtained by using face-to-face survey techniques between May 2, 2022, and July 10, 2022. 587 of the 680 participant forms left to the relevant centers were received. The return rate is 86%. Within the scope of the research, 587 people were reached, and the data of 66 subjects were excluded from the research due to incomplete and incorrect filling in of the data and not regularly participating in the relevant activity, and the procedures were carried out with 521 data points. In the research, the question "I have been doing these activities regularly for at least 6 months" was added to check whether individuals regularly participate in serious leisure time activities. Of the data obtained, 66 were excluded from the research set because 47 individuals did not regularly participate in these activities and 19 individuals filled out the questionnaire incompletely and incorrectly. The analyses were carried out through the "Jamovi" package program, which is open-source software.

FINDINGS

A binary logistic regression analysis was conducted to examine the effect of individuals' education level, weekly participation time, average perception of physical violence, and gender

variables on the likelihood of preferring serious leisure activities in nature (outdoors). Before the analysis, the assumptions of freedom from outliers and multicollinearity were checked. The Z scores of the quantitative predictor variables were analyzed to check for outliers, and no values within 3 were found. In addition, the VIF values of the predictor variables were less than 10 and the tolerance values were greater than 0.2, which proved that there was no multicollinearity problem. After it was determined that the assumptions were sufficiently met, the results of the binary logistic regression analysis are presented in Table 2.

Table 2. Results of Logistic Regression Analyses of Individuals' Serious Leisure Preferences

Predictor Variable	B	Sh	z	p	Odds Ratio	Confidence Interval (%95)	
						Lower	Upper
Predictor	-6.214	1.225	-5.075	<.001*	0.002	1.814	0.022
Education Level	-0.342	0.145	-2.360	0.018*	0.710	0.535	0.943
Weekly Attendance Period	0.394	0.101	3.892	<.001*	1.483	1.216	1.808
Physical Violence	-0.210	0.247	-0.851	0.395	0.810	0.499	1.315
Gender (Male-Female)	0.397	0.273	1.454	0.146	1.487	0.871	2.540
Deviance = 497; AIC = 509		R ² (Nagelkerkes's) = 0,47		X ² = 226	*p<.05		

It was determined that the predictor variables in the model obtained as a result of the analysis significantly predicted the likelihood of the individual to prefer outdoor serious leisure time activities ($X^2=75.3$, $p<.05$). It is seen that the model consisting of education level, weekly participation time, physical violence attitude and gender variables explains 47% of the variance (Nagelkerkes' R^2) in the preference for outdoor serious leisure time activities. When the significance of the regression coefficients related to the predictors in the model were examined, it was found that weekly participation time ($z=3.892$, $p<0.05$) and education level ($z=-2.360$, $p<0.05$) were significant predictors, while gender ($z=1.454$ $p>0.05$) and physical violence ($z=-0.247$, $p>0.05$) were not significant predictors (Table 2).

When the odds ratios of the predictor variables are analyzed, it can be said that the probability of participating in outdoor serious leisure time activities is 1.487 times higher for men than for women in the model, and in terms of physical violence attitude, the tendency of the physical violence attitude of individuals who participate in outdoor serious leisure time activities decreases by 0.810 compared to the other group (Table 2).

Table 3. Open Space Leisure Time Classification Table for the Choice of Activity

Observed	Estimated variable			Predicted (%)
	Open Space	Closed Area	Total	
Open Space	175	83	258	79 (Correct)
Closed Area	26	237	263	68 (Correct)
Total	201	320	521	90 (Accuracy)

Not: The cut-off point was taken as 0.5

As seen in Table 3, the model was able to correctly classify 90% of individuals' outdoor serious leisure time activity preferences in general, and it was able to correctly predict 79% of the level of tendency towards outdoor serious leisure time activities and 68% of indoor serious leisure time activities.

DISCUSSION

The aim of the studies in which attitudes towards violence are measured is to measure individual attitudes, determine which variables lead individuals to violence or which tools are related to the tendency towards violence, and take necessary measures (Kreager, 2007; Iannotti et al., 2009; Ybarra & Thompson, 2018; Rasmussen et al., 2020; Naseri et al., 2023). The phenomenon of violence has been and continues to be examined in many studies from the perspectives of different disciplines. This situation is revealed in the "World Report on Violence and Health," published by the World Health Organization in 2002, and it is constantly emphasized in the research conducted on the subject to date (WHO, 2022; WHO, 2021; WHO, 2021a). Based on this point, it was tried to understand how individuals' gender, educational status, weekly participation in serious leisure time activities, and physical violence attitudes influence their choice of serious leisure time activities.

It was revealed in the research findings that individuals who prefer open spaces within the scope of serious leisure activities have a lower tendency towards physical violence compared to individuals who prefer closed spaces. As stated in the "Attention Reconstruction Theory" put forward in the pioneering study by Kaplan (1995), spending time in nature causes consistent positive emotions as well as benefits such as stress reduction and increased attention capacity. A growing body of research suggests that spending time in nature, especially through physical recreation activities, contributes to positive psychological outcomes (Keniger et al., 2013). Although psychological state is known to influence violent tendencies (Anderson & Kiehl, 2014), it has been shown that individuals with normal levels of psychological well-being may be less violent (Vollhardt et al., 2014). In addition, in a study conducted by Nattiv et al. (1997), it was concluded that the use of weapons and involvement in physical fights, and thus the tendency to violence in university athletes, were higher in individuals participating in indoor sporting activities. At this point, the findings obtained in this study support the literature.

The duration of weekly participation in serious leisure time activities was also found to be a predictor of the choice of outdoor serious leisure time activities and physical violence behavior. Participation in both serious leisure activities and physical activities is associated with a high sense of health awareness (Lamb et al., 1990). One of the factors that is effective in the emergence of these realizations is the hormone secreted during the activity. Through the hormones secreted during serious leisure time activities, several chemical mechanisms can be activated on the body and can lead the individual to mental and physical well-being. For example, endorphins secreted during physical activity contribute to happiness (Yuliadarwati et al., 2022), adrenaline and noradrenaline contribute to energy (Chaunty et al., 2022), and cortisol contributes to the stabilization of blood sugar levels (Jia et al., 2022). It is hypothesized that feeling physically and mentally well may reduce the tendency towards violent behavior. In addition, it is expected that the increase in weekly participation time will decrease the tendency towards violence.

Another finding obtained in this study activities and violence. There is a comprehensive literature on the relationship between education level and violence. It is stated that education level is related to violence, especially depending on socioeconomic status (Evans & English, 2002). It is estimated that societies with high levels of education will take faster steps towards development and that individuals will be much more likely to turn to alternative solutions such as problem-solving skills, communication, and mediation depending on the increase in the level of education (Awan et al., 2011; Bonal, 2007; Silva-Laya et al., 2020). As a matter of fact, the main purpose of education is to improve the knowledge, skills, understanding, and values of individuals, to reveal their potential, and to contribute to the learning process that lasts throughout their lives. There are many studies that reveal the existence of a positive relationship between education and health awareness. When the common results of the studies are examined, it is seen that an increase in the level of education is associated with higher health

awareness (Cowell, 2006; Stacey, 1998; Zajacova & Lawrence, 2018; Zimmerman & Woolf, 2014). Thus, it is expected that there is a relationship between education level and participation in serious outdoor leisure activities. As a matter of fact, studies show that the effect of outdoor recreation activities on health parameters is higher compared to indoor activities (Godbey, 2009; Hammond et al., 2011; Pasanen et al., 2014). At this point, in this study results support the literature.

Conclusion

This study data does not contain information on the selection of a specific activity by individuals, in addition to grouping the serious leisure activities in which individuals participate as indoor and outdoor. This point reveals the deficiencies of our research. In addition, our research was conducted only on serious leisure-time activity participants. In addition, the economic welfare status variable, which is estimated to have a significant effect on individuals' choices of serious leisure activities, was excluded from our research. This situation shows another shortcoming of our research. Finally, there is a need for qualitative research designs to understand the reasons for the factors that are effective in the choice of serious leisure activities in outdoor areas compared to indoor areas. In this way, the reasons underlying the phenomena can be analyzed in depth and contribute to the literature.

As a result, it was found that the duration of participation and education level were effective predictors of individuals' choice of outdoor serious leisure activities compared to indoor activities. In addition, it was revealed that the attitudes towards violence of individuals who participate in outdoor serious leisure time activities are at lower levels compared to individuals who participate in indoor serious leisure time activities.

Recommendation

Based on the findings and limitations of the study described, there are several suggestions for future research in this area. First, future studies should aim to address the identified deficiencies, such as not having information on the specific activity selection by individuals. Conducting qualitative research to delve deeper into the reasons why individuals choose outdoor over indoor serious leisure activities would be valuable. This could involve in-depth interviews or focus groups to explore the motivations and preferences of participants.

Secondly, researchers should consider incorporating additional variables that were excluded in the present study, such as economic welfare status. This can help provide a more comprehensive understanding of the factors influencing individuals' choices of serious leisure activities. Additionally, exploring the impact of other socio-demographic variables, psychographic factors, and environmental factors on activity choices could enhance the depth of future studies.

Limitations

In this study, serious leisure-time participants have been categorized in a categorical manner. Future research should aim to overcome the limitations of the current study and provide a more detailed understanding of the factors influencing preferences between indoor and outdoor serious leisure-time activities.

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Author(s)' statements on ethics and conflict of interest

Ethics statement: We hereby declare that research/publication ethics and citing principles have been considered in all the stages of the study. We take full responsibility for the content of the paper in case of dispute.

Conflicts of Interest: There are no conflicts of interest declared by the authors.

Funding: None