

## Comparison of Students' Perception of Environmental and Social Supports for Participation in Physical Activities Given their Gender

Mahbube Hoseini<sup>a</sup>, Mones Yadegar<sup>b</sup>, Zahra Amini Sarteshnizi<sup>c</sup>, Samaneh Shahba<sup>d</sup>, Sabora Sam Deliri<sup>e</sup>, Khalil Allahviridiyani<sup>f</sup>

<sup>a</sup> Department of psychology (comparative education), Allameh Tabatabaiee University, Tehran, Iran

<sup>b</sup> Department of Counseling And Guidance, Allameh Tabatabaiee University, Tehran, Iran

<sup>c</sup> Department of Sport Psychology, Islamic Azad University khorasagan Branch, Esfahan, Iran

<sup>d</sup> Department of Counseling And Guidance, Islamic Azad University Tehran-Olom Tahghighat Branch, Tehran, Iran

<sup>e</sup> Department of psychometric, Islamic Azad University Tehran-Olom Tahghighat Branch, Tehran, Iran

<sup>f</sup> Department of psychometric, International University of Imam Reza, Mashhad, Iran

E-mail: [ka6667@gmail.com](mailto:ka6667@gmail.com)

**Abstract:** Dominant climate in collegiate environments and social supports from friends and family are taken into account as important determinants of physical activity level. In this direction, the purpose of present study was allocated to determine gender differences in perceptions of environmental and social supports for participation in physical activities in college age students. To this aim, in an ex post facto study, 300 undergraduate students (162 girls and 138 boys aged 20.32±0.98 and 20.97±1.02 years, respectively) who were studying in the second semester of 2012 at the Alzahra and Tehran universities, completed individual characteristics questionnaire, Perceived School Climate for Physical Activity Scale (Birnbaum et al., 2010), and Social Support for Physical Activity Scale (Grieser et al., 2010). Data were analyzed using Multivariate Analysis of Variance (MANOVA) and follow up one-way ANOVA at the  $p < 0.05$ . Results showed that gender has not significant effect on students' perceptions of professors' environmental support ( $p > 0.05$ ). But about peers support, boy students had higher perceptions of their peers' environmental support ( $p < 0.001$ ). Findings of the study showed that there is no significant difference between girl and boy students' perceptions of family social support ( $p > 0.05$ ). About social support provided from friends, results offered more benefits for boy students ( $p < 0.05$ ). This study discusses gender differences in the environmental and social supports to improve students' participation in physical activities.

[Hoseini, M., Yadegar, M., Amini Sarteshnizi, Z., Samaneh, Sh., Sam Deliri, S., Allahviridiyani, Kh. **Comparison of Students' Perception of Environmental and Social Supports for Participation in Physical Activities Given their Gender.** *Life Sci J* 2018;15(9):95-99]. ISSN: 1097-8135 (Print) / ISSN: 2372-613X (Online). <http://www.lifesciencesite.com>. 13. doi:[10.7537/marslsj150918.13](https://doi.org/10.7537/marslsj150918.13).

**Keywords:** Gender, Environmental support, Social support, Physical activity

### 1. Introduction

Physical activity as one of the key factors in preservation and improvement of physical and mental health plays a crucial role in promotion of life quality. On the other hand, participation of the youth in physical activities is of a special significance in promotion of the society's health level. Review of the prior research indicates that numerous factors contribute to determining physical activities level and participation degree in that role, while these factors are affected by sexual differences (Richman, Rodenfeld & Hardy). Among these factors, it can be referred to environmental and social support for which at the moment in the area of sports and physical activities there is an increasing research orientation for determination of this role.

Assessment of social support initially was started from its conceptualization in regard to the dwindling (diminishing) in the area of social psychology. Based on the model of Environmental and Social Support developed by Richman, Rosenfeld & Hardy (1993),

social support is defined as the degree of physical and emotional assurance provided by family, friends, colleagues and other people. Based on this theoretical framework, social support is assessed by eight content factors (table 1) and four measurement factors, namely social supporters, degree of satisfaction with social support, degree of difficulty in obtaining more support, and significance of social support for the individual. In most sports researches too, this model has been employed as a framework for study of social support. By a more general approach, Rees & Hardy (2000) introduced social support in sport as a combination of four dimensions, namely Emotional (support for consolation, security and guidance of individual towards a direction in which he feels has been loved and supported), Esteem (reinforcement of competence feeling and self-esteem), Informational (offering counseling and guidance), and Tangible (providing instrumental and objective accompaniments). Advantages of social support may be expressed by people's support for harmful effects

of stress, ability to recover from injury and its function as an environmental support factor,

contribution to adaptation and growth, increase of self-esteem, and reduction of doubt.

**Table 1:** Content factors of social support (source: model of Richman et al, 1993)

Content factors	Description
Listening support	Individual listens to you without offering any counseling or judgment
Task appreciation	Individual is aware of your efforts and appreciates your sports activities
Task challenge	Individual challenges your intellectual method regarding your athletic activities in order to reinforce and motivate you and guide you towards creativity, motivation and greater participation in athletic activities
Emotional support	Individual console you and shows that he is beside you and support you
Emotional challenge	Individual challenges you for evaluation of attitudes, values and emotions
Reality confirmation	Individual is like you and views athletic issues in the way you do and helps you by approval of your perceptions and views to the world in order to concentrate on your own matters
Tangible support	Individual provides you with financial support, products and gifts
Personal assistance	Individual provides services or assistance to you

The prior research indicates that environmental and social supports on the part of family, friends and peers are accompanied with increase in level of physical activities [13, 14, and 15] and change in exercise behaviors [17], whereas social isolation has a negative correlation with level of physical activity [18]. Hence, attention to environmental and social supports for promotion of the youth's participation in physical activities is of importance.

There is a variety of evidence for the mediatory effect of age and gender in this regard. Social support of family and friends for exercise is associated with Californian aged men and women's physical activities (Rees, & Hardy, 2012). but in the survey conducted on the elderly in Canada, social support was correlated only with women's continuous physical activity (Hankonen, Absetz, Ghisletta, Renner & Uutela, 2010). Review of physical activity's correlations in children and the adolescence indicates that there is no correlation between influence of parents and peers and children's physical activity, however, in the youth of 13 to 18 years old, a positive relationship between physical activity and social support of people belonging to the same race and support of prominent people are reported (Kaplan, Newsom, McFarland, 2011). Overall, the relationship between family's social support and exercise in the youth is of less significance (Klavestrand, & Vingard, 2010). In the juveniles, peer support is a stronger social determinant for level of physical activity relative to family support, although among the youth (Molloy, Dixon, Hamer & Sniehotta, 2010). and

college students (Robbins, Stommel, & Hamel, 2008). family support in women and peer support in men are found to be more significant. In addition, recent studies to support the role of sexual differences in perception of environmental and social supports for participation in physical activities (Grieser, Neumark-Sztainer, Saksvig, Lee, Felton, & Kubik, 2008). In general, it seems there are some differences between perception of man and woman regarding environmental and social supports. However, given limitations of the studies on this subject, especially inside the country, and inconsistency of results, no reliable pattern can be referred to. So present research tries to find out whether gender is of any influence in students' perception of environmental and social supports for participation in physical activities.

## 2. Methodology

This research in terms of methodology is of causal-comparative type, in terms of purpose of applied type, and in terms of time of retrospective type. The research's respondents are 300 students of bachelor program (162 girls of  $21.32 \pm 0.98$  years and 138 boys of  $15.9 \pm 1.02$  years) from the statistical population of Al Zahra University and Tehran University in the academic year 2011-2012 who are selected using Convenience sampling method and after being informed of the research's purposes declared readiness for participation in the study.

To collect information, field study and questionnaire containing personal information, the edited version of the Scale of School's Perceived

Atmosphere for Physical Activity developed by Birnbaum et al (2005) [27] and Scale of Social Support for Physical Activity [28] were used. Scale of School's Perceived Atmosphere for Physical Activity is composed of 5 articles for measurement of the perceived atmosphere by teachers (2 articles,  $\alpha = 0.66$ ) and Perceived Atmosphere by peers (3 articles,  $\alpha = 0.75$ ) the responses of which are calibrated on Likert's 5-degree continuum from 1 (I fully disagree) to 5 (I fully agree). This scale has been constructed in line with improvement program of physical education in high school of the US [29]. In present research, articles of this scale are edited for use in university environment, in a way that the word "professor" came in place of "teacher". The used questionnaire of social support was constructed by Grieser et al (2008) and is consisted of 8 articles for measurement of friends' social support (3 articles,  $\alpha = 0.79$ ) and family social support (5 articles,  $\alpha = 0.81$ ) the responses of which are calibrated on Likert's 5-degree continuum ranging from 1 (never) and 5 (every day). To prepare Persian version of the intended tool, the original copy of the questionnaires were rendered into Persian by two specialized translators and their formal and content validity after applying the necessary modifications was approved by the experts. Next, through initial investigation among 40 student of the statistical population, the scale's internal uniformity and the phrases' modified correlation coefficient were examined and confirmed. To collect the information, first, the required permit for presence of the questioners in the university and dormitory were obtained. The respondents were asked before filling the questionnaire to listen carefully to the respective instructions provided by the questioner and to answer all the questions. In addition, the respondents were asked to report honestly and carefully what they feel instantly, since there is no wrong or right answer. In sum, from 360 distributed questionnaires, 300 questionnaires were analyzed. The questionnaires' rate of return was 83.3%. To describe the gathered information, mean, standard deviation, standard error, table and diagram were used. After examining

normality of the data's multivariate distribution using Box's M test and after examining homogeneity of variance for the compared groups using Levene Test, Multivariate Analysis of Variance (MANOVA) was employed in order to determine the effect of the independent variable Gender on dependent variables. All analyses were conducted at significance level of 0.05 using SPSS software (Version 15).

### 3. Findings

Descriptive statistics pertaining to research's variables are presented per gender in table 2. Based on the findings, the score of male and female student for the perceived environmental support on the part of professors are  $3.15 \pm 1.08$  and  $3.27 \pm 1.22$ , and for the perceived environmental support on the part of peers are  $3.30 \pm 1.35$  and  $4.01 \pm 1.41$ , respectively. Further, the score of male and female students for the perceived social support on the part of family are found to be  $3.30 \pm 1.04$  and  $3.15 \pm 1.22$  and for the perceived social support on the part of friends  $2.99 \pm 0.90$  and  $3.26 \pm 0.99$ , respectively.

The obtained results from test of hypotheses indicate that the main effect of gender on the perceived environmental supports on the part of professors and peers (Wils' lambda = 0.938,  $F(2, 297) = 9.759$ ,  $p < 0.001$ ,  $\eta^2 = 0.062$ ) and the perceived social supports on the part of family and friends (Wilks' lambda = 0.957,  $F(2, 297) = 6.605$ ,  $p = 0.002$ ,  $\eta^2 = 0.043$ ) is significant. Table 2 provides results of ANOVA post hoc test for comparison of the male and female students' perceived supports. According to this table, perceived environmental support on the part of professors does not varies ( $F(1, 298) = 0.821$ ,  $p = 0.366$ ,  $\eta^2 = 0.003$ ), as for peers' environmental support, male students have a significantly higher perception of peers' environmental support ( $F(1, 298) = 19.461$ ,  $p < 0.001$ ,  $\eta^2 = 0.061$ ). In addition, the results indicate that gender has no significant effect on the perceived social support on the part of family ( $F(1, 298) = 1.218$ ,  $p = 0.271$ ,  $\eta^2 = 0.02$ ).

**Table 2:** Effect of gender of perceived environmental and social supports

Variables	Gender		F value	P value	$\eta^2$
	Girl (n = 162)	Boy (n = 138)			
Professors environmental support	$3.15 \pm 1.08$	$3.27 \pm 1.22$	0.821	0.366	0.003
Peers' environmental support	$3.30 \pm 1.35$	$4.01 \pm 1.41$	19.461	0.001	0.061
Family's social support	$3.30 \pm 1.04$	$3.15 \pm 1.22$	1.218	0.271	0.004
Friends' social support	$2.99 \pm 0.9$	$3.26 \pm 0.99$	6.074	0/014	0.02

### 3. Discussion and conclusion

This research intends to determine sexual differences in environmental and social supports for

participation in physical activity at the age group of university. Research's findings indicate that there is no significant difference between the two genders

regarding the perceived environmental support on the part of professors, however, male students compared to female ones have had a higher perception of environmental support on the part of peers. These results indicate that the created atmosphere on the part of professors in the universities for participation in physical activities does not differ for male and female students, however, among the male students there is a more positive atmosphere in physical activity. So far, few studies have investigated prevailing atmosphere in educational environment and most of them were focused on schools. In study of sexual similarities and differences in the factors associated to moderate to intensive physical activity, Wenthe, Janz & Levy (2009) showed that young girls more positively evaluated school's atmosphere for performance of moderate to intensive physical activity (Taymoori, Rhodes, & Berry, 2010), which is not consistent with present research's findings. This inconsistency may be associated to such factors as age, culture and type of physical activity subject to evaluation. In the research by Wenthe et al (2009), school's atmosphere for performance of moderate to intense physical activities (test of physical fitness) has been measured which considering the difference of the understudy physical activity in present research (physical activity of leisure time) the found inconsistency in the results can be attributed to type of physical activity. In regard to the existing sexual differences in environmental supports for physical activities, few researches has been so far done and for more knowledge of sexual differences in this area, further researches are required to be done. Research's results regarding social support indicated that there was no significant difference between men and women's perception of social support on the part of family. However, in regard to social support on the part of friends, men enjoyed more support relative to women. These findings on sexual differences in social support on the part of family are not consistent with the results obtained by Wu, Pender & Noureddine (2003), Robbins, Stommel & Hamel (2008). Wu et al (2003) in a study on Taiwanese juveniles demonstrated that girls compared to boys receive greater support from parents who were active (Wenthe, Janz, & Levy, 2009). In addition, Robbins et al (2008) demonstrated that male students compared to female ones perceived a greater degree of social support on the part of their fathers and brothers (Wallace, Buckworth, Kirby, & Sherman, 2010). Despite the inconsistent findings, most of the studies suggest a greater level of social support for physical activity in men (Wright, Wilson, Griffin, & Evans, 2010). Moreover, the studies indicated that supply source of social support for physical activity of men lies outside the family sphere and is primarily focused on social support of friends and peers which is

consistent with present research's findings (Taymoori, Lubans, & Berry, 2010). Higher social support for men can be attributed to the sex stereotype present in cultures. The stereotypical sexual attitudes consider heavy tasks specific to men and easy tasks to women. For example, the athletic role is primarily defined for men than for women. Presence of such attitudes fades out formation of social support for women's physical activity. In analysis of social support by family for performance of intensive physical activities, Findings of Wenthe et al (2009) found that boys compared to girls enjoyed a higher degree of social support on the part of family. Woman's reliance on family's social support and man's reliance on the social support provided by friends and peers may add effectiveness of the interventions which profit from social support for promotion of athletic participation (Coe, Watt, West, Hawkins, Asarnow, Markham, 2013). In confirmation of dependence of woman's physical activity on familial social support, Sowda, Dishman, Pfeiffer & Pate (2007) through a longitudinal study showed the girls who are confronted with decreasing social support experience greater decrease in level of their physical activities compared to boys faced with the same condition [30]. This claim is also supported by findings of Molloy, Dixon, Hamer & Sniehotta (2010). Molloy et al (2010) demonstrated that only among female students, less social support for physical activity is accompanied with reduced physical activity. Thus, in planning for promotion of girls and women's physical activity level, much emphasis should be laid on social support, particularly social support of family. It is noteworthy that the type of social support is of high significance in effectiveness of such support. For instance, Wright, Wilson, Griffin & Evans (2010) in their research on low-income families found that girls and boys are inclined to receiving tangible assistances of financial nature. Hence, determining the type of social support and its supply source is crucial for different sexes.

In sum, results of present research indicate that degree of male students have a greater perception of environmental support on the part of peers and friends relative to female students which suggests necessity of paying attention to environmental and social supports among female students on the part of the respective authorities. Considering these findings, the physical education authorities of educational centers are recommended to prepare some plans for bringing change in universities' atmosphere based on high significance of physical activities for female sex and to propagate physical activities among them. In addition, for promotion of female students' perception of social support on the part of friends, it is suggested female students to be put in friendship groups in which athlete students or those who give importance

to physical activities are members and to participate in physical activities. Future research in this area can significantly help determination of sexual differences in supply sources of family's social support (father, mother, sister and brother) and the type of these supports (emotional, tangible,...) in further clarification of the issue social support among university students.

#### Corresponding Author:

Samaneh Shahba

Department of psychometric, Islamic Azad University  
Tehran-Olom Tahghighat Branch, Tehran, Iran

E-mail: [ka6667@gmail.com](mailto:ka6667@gmail.com)

#### References

1. Coie, J. D., Watt, N. F., West, S. G., Hawkins, J. D., Asarnow, J. R., Markham, H. J., et al. (2013). A conceptual framework and some directions for a national research program. *American Psychologist*, 48, 1013–1022.
2. Grieser, M., Neumark-Sztainer, D., Saksvig, B. I., Lee, J. S., Felton, G. M., & Kubik, M. Y. (2008). Black, hispanic, and white girls' perceptions of environmental and social support and enjoyment of physical activity. *American School Health Association*, 78(6), 314-323.
3. Hankonen, N., Absetz, P., Ghisletta, P., Renner, B., & Uutela, A. (2010). Gender differences in social cognitive determinants of exercise adoption. *Psychol Health*, 25(1), 55-69.
4. Kaplan, M. S., Newsom, J. T., McFarland, B. H., & Lu, L. (2011). Demographic and psychosocial correlates of physical activity in late life. *American Journal of Preventive Medicine*, 21, 306–312.
5. Klavestrand, J., & Vingard, E. (2010). The relationship between physical activity and health-related quality of life: a systematic review of current evidence. *Scandinavian Journal of Medicine & Science in Sports*, 20(2), 366.
6. Molloy, G. J., Dixon, D., Hamer, M., & Sniehotta, F. F. (2010). Social support and regular physical activity: Does planning mediate this link? *British Journal of Health Psychology*, 15(4), 859-870.
7. Rees, T., & Hardy, L. (2012). An investigation of the social support experiences of high-level sports performers. *The Sport Psychologist*, 14, 327–347.
8. Robbins, L. B., Stommel, M., & Hamel, L. M. (2008). Social support for physical activity of middle school students. *Public Health Nursing*, 25(5), 451–460.
9. Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (2010). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32, 963–975.
10. Taymoori, P., Lubans, D., & Berry, T. R. (2010). Evaluation of the health promotion model to predict physical activity in iranian adolescent boys. *Health Educ Behav*, 37(1), 84-96.
11. Taymoori, P., Rhodes, R. E., & Berry, T. R. (2010). Application of a social cognitive model in explaining physical activity in Iranian female adolescents. *Health Educ Res*, 25(2), 257-267.
12. Trost, S. G., Owen, N., Bauman, A., Sallis, J. F., & Brown, W. J. (2012). Correlates of adults' participation in physical activity: Review and update. *Medicine and Science in Sports and Exercise*, 34, 1996–2001.
13. Wallace, L. S., Buckworth, J., Kirby, T. E., & Sherman, W. M. (2010). Characteristics of exercise behavior among college students: Application of social cognitive theory to predicting stage of change. *Preventive Medicine*, 31, 494–505.
14. Wenthe, P. J., Janz, K. F., & Levy, S. M. (2009). Gender Similarities and Differences in Factors Associated with Adolescent Moderate-Vigorous Physical Activity. *Pediatr Exerc Sci*, 21(3), 291–304.
15. Wright, M. S., Wilson, D. K., Griffin, S., & Evans, A. (2010). A qualitative study of parental modeling and social support for physical activity in underserved adolescents. *Health Educ Res*, 25(2), 224-232.

9/25/2018