

## Behavior Sports of Students in Physical Education Ardabil Province Based on the Change Process and its Relationship with Self

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### Abstract

It must be acknowledged that physical activity and proper scientific, obsolete section of the students, however, it can be considered for benefits. TTM as a model and comprehensive model in the sports field. On the other hand, the self as one of the major structures in the growth and development of students and a significant direct impact is known. Therefore, this study aimed to investigate the exercise behavior of students in physical education Ardabil province based on the change process and its relationship with self-efficacy were conducted. In this study, 100 students participated in the second and third high school in the city of Meshkin Shahr were selected using stratified random sampling. Participating students including 50 girls and 50 were boys. The data collected, a four-part questionnaire including personal and demographic information, questions about the level of physical activity behavior, physical activity and self-efficacy questions in sport. The relationship between variables using the Mann-Whitney U, Kruskal-Wallis H and Spearman correlation coefficient (rs) were determined. The average age of the students participating in the study was  $17 \pm 15$ . The results showed that the relationship between self and change the process variables ( $p < 0/001$ ) and exercise behavior ( $p < 0/001$ ) there. Based on the results, it can be said that self-important exercise and the presence of this factor, along with the efficient and effective athletic behavior shows a significant relationship, positive, reciprocal and effective these variables in exercise.

**Key word:** TTM behavior, self-efficacy, exercise behavior, physical education students

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### Introduction

A sedentary lifestyle is a major problem for public health. The World Health Organization findings suggest that sedentary lifestyle is one of the 10 leading causes of death in the world (Loon & Frank, 2011). Teens with rapid changes in behavioral patterns. These changes in the risk of developing adolescent health risk behaviors such as lack of exercise and poor dietary habits that impact later years, even a lifetime will remain. Regular physical activity is one of the most important factors in creating and maintaining health as one of 15 priority change behavior to improve health have been raised. Regular participation in physical activity can improve the health of young people physically, psychologically and socially to be (Research & et al, 2009) Monitoring studies in the field of exercise behavior suggests that low levels of physical activity from adolescence to adulthood, and then remain stable. According to some studies, beliefs related to physical activity, social and physical environment is one of the factors influencing the decline in sports behavior (Cortese & Dalonzo, 2007). Who's your life style choices during the academic year and at the same time are more willing to change and challenge. At the same time non-active lifestyle starts and if intervention is not the situation is stabilized (Meriwether & et al, 2008). In studies that have been conducted in Western countries to identify factors influencing the patterns of health education, the emphasis is on the establishment and continuation of exercise behavior. The patterns of health education, integrated TTM as a model for behavior change, is used to promote exercise behavior (Wallace & et al, 2008). To this end, a comprehensive study of the factors influencing the physical activity of a theoretical framework was used. The TTM is that by trance, Prochaska and Dyklmnt comprehensive behavior change as a model to study the determinants of behavior. In this model, it is assumed that people can be in various stages of readiness to change and, therefore, should be to change the behavior of a set of stages that pass through five stages of thinking or pre-planning, thinking or planning, preparation, operation and maintenance. In the pre-contemplation stage, the person is not aware of the type of behavior and lack of interest in changing individual behavior can be seen. In the contemplation stage, a reasonable addition to the problem, consequences their behavior is also considered. The next assumption is that patients are ready to change their behaviors to achieve goals. It's more established. At this stage, when treatment is more than 6 months, after holding force is formed. Regular physical activity, including behavior which collect basic information about the changes in the design of appropriate and effective it can be used to start physical activity (Thompson, 2011). In studies that have been conducted in Western countries to identify factors influencing the patterns of health education, the establishment and continuation of sport behavior is emphasized. TTM, a comprehensive and integrated model for behavior change, is used for improving performance (Spencer & et al, 2006; Kreuter & Wray, 2003; Bridle & et al, 2005). The social cognitive theory, which can be used as a criterion to understand the behavior and develop appropriate interventions for student sports start of physical activity is noted (Bandura, 2004). The concept of self-efficacy, by Albert Bandura has been suggested that he is one of the aspects of social-cognitive theory (Schwartz, 1997). Bandura's self-efficacy as a central concept that the perception of ability to perform an act that, according to the notes. In Bandura's social learning theory, self-growth as the judge of how to do business in the expected location, the original concept of human activities (Bandura, 1982). Self, a sense of control of the individual is dependent on environment and

behavior and cognitive belief that determines whether the treatment can make the necessary changes? How much effort is required? ? And how long it can be tough to deal with setbacks and failures? Efficacy, directly and indirectly associated with healthy behaviors on healthy behaviors in order to achieve the objectives, impact. Efficacy on the challenges that people face, affect. People with strong self-selected goals more difficult, they pay attention to the situation and conditions rather than barriers to care (and Lutz Synska Schwartz, 2007). Several studies confirm the effectiveness of self-efficacy and put emphasis on different aspects. For example, Schwartz (1992) states that self-efficacy, on the perseverance, commitment and effort to achieve the goal of influence. Low self-efficacy can destroy motivation and adversely affect the physical health (Bandura, 1982; Schultz, 1998). Parents, peers and the media have an important role in the development of self-efficacy (Bandura, 2001). Research has shown that the efficacy with more health, more success and social integration related (Schwartz and Fuchs, 1996). Bandura's (1997) study noted that the low level of long-term efficacy in the pediatric depression. Syvka Cheng and Stephen (2000) suggest that an increase in efficacy, improved mental health consequences. In this by Asadpour and colleagues (1393) conducted to investigate the exercise behavior of students of Rafsanjan University of Medical Sciences based on stages of change model and its relationship with self-efficacy were the results of this study indicate that the issue between the stages There is a significant change and self-respect. The results of this study showed that more than half of the students in the second stage of exercise behavior (thinking and the thinking process) are located. Physical and mental health of students is vital, therefore, to pay special attention to the issue of education and sports officials and coaches.

### Research Methodology

This was a cross sectional study that aimed to evaluate the behavior of sports and physical education students in Ardabil province based on the change process and its relationship with self-efficacy were conducted. The study consisted of high school students in the city of Meshkin shahr through stratified sampling method, 100 students were selected second and third instance. Sampling method, sampling was random. The data collected includes four-part questionnaire. The first part consists of individual and demographic information (personal and family history, physical activity, the presence of an athlete in the life and history of a particular disease), the second part contains questions related to the exercise behavior (questionnaire five part SECQ reliability coefficient was reported in the command bar and associates 94/0, the third part includes questions of sports and physical activity (physical activity per week and exercise self-report questionnaire, which was based on METS scale test-retest coefficient in the command was determined once and Partners 79/0) and Part IV of self-efficacy in sport that using a questionnaire provided by Nyq and scale factor with four modes (from 1 to 4 not at all certain, absolutely sure) was . Reliability coefficient of the questionnaire in the command bar and Partners 90/0 and 868/0 were reported Cronbach's alpha [13]. After obtaining individual consent from research participants, the questionnaire was completed by students distributed among all students. All participants in the study were female students and the mean age was  $17 \pm 15$ . Finally, data analysis using SPSS version 20 statistical test Mann Whitney U, Kruskal-Wallis H, and Spearman correlation coefficient (rs) were studied. The significance level was set at 05/0 tests. findings All students participating in the study responded to the questionnaire show that the response rate was 100%. The average age of students was 15.6, standard deviation 2.2 years the minimum age for students age 14 years and maximum of 17.9 years of age. The mean height of students  $168/70 \pm 15/30$  cm and mean weight of students  $52/45 \pm 13/30$  respectively. In terms of gender, students participating in the study, 50 male students and 50 female students.

Table 1. Descriptive Index scores of students

number	value
50%	50
50%	50
98%	98
1%	1
1%	1
-	-
100%	100
90%	90
10%	10
45%	45
65%	65
30%	30
70%	70
2%	2
98%	98

The average number of heavy exercise  $70/1 \pm 98/0$ , average  $74/1 \pm 33/1$  & Style  $45/2 \pm 33/2$  per week. The average and standard deviation of weekly physical activity of students  $90/20 \pm 94/19$  respectively. The lowest and highest average score of efficacy were 3 and 24, respectively. Of the students, 13 (13%) in the pre-contemplation stage, 20 patients (20%) of the contemplation stage, 25 patients (25%) in the preparation stage, 27 patients (27%) in action, and 15 (15%) were in the maintenance stage. In Table 2, the relationship between the athlete's behavior, self-efficacy and exercise behavior change process variables in physical education students of Ardabil province in 1394 is studied.

Table 2 Relationship between sport behavior, self-efficacy and exercise behavior change process variables in physical education students of Ardabil province in 1394.

Valuep	The stages of change			The efficacy			The exercise behavior			Score
	Correlation coefficient	number	Value p	Correlation coefficient	number	Value p	Correlation coefficient	number	Variables	
<b>0.813</b>	-0.017	100	0.52	0.046	100	0.541	-0.031	100	old	
<b>0.003</b>	0.19	100	0.001	0.23	100	0.733	-0.02	100	Stature	
<b>&lt;0.001</b>	0.288	100	<0.001	0.255	100	0.001	0.234	100	Weight	
<b>&lt;0.001</b>	0.543	100	<0.001	0.409	100	<0.001	0.820	100	The frequency of intense exercise a week	
<b>&lt;0.001</b>	0.473	100	<0.001	0.378	100	0.008	0.845	100	The frequency of moderate exercise a week	
<b>&lt;0.001</b>	0.433	100	<0.001	0.24	100	<0.001	0.78	100	Number of exercise a week	
<b>&lt;0.001</b>	0.571	100	<0.001	0.401	100	-	-	-	The exercise behavior	
<b>&lt;0.001</b>	0.587	100	-	-	-	<0.001	0.401	100	The efficacy	
-	-	-	<0.001	0.511	100	<0.001	0.264	100	Stages of Change	

The results showed that exercise of self-induced ( $p < 0/001$ ), there was a significant family history of exercise ( $p < 0/001$ ), history of sports in the area ( $p < 0/001$ ) was significant. The relationship between self-efficacy and field of study ( $p < 0/001$ ), record your own exercise ( $p < 0/001$ ), family history of exercise ( $p < 0/001$ ) and the history of sports in the area ( $p < 0 / 014$ ) was significant. Mann-Whitney U test results showed that the efficacy in people who exercise and family history and local history of the sport, so significantly more than those who did not have the records.

### Discussion and Conclusion

action (to change people's behavior to achieve practical and correct behavior to do) with. The results of this study with the results Asadpour et al (1393) is antithetic. the study sample included high school students with an average age of 15.6 are second and third, there is a significant difference. According to this study, people who exercise their history, their family and community, compared with people who had no history of sports in this situation, have earned a higher score of exercise behavior. The results with the results Asadpour and colleagues (1393), the steering load and colleagues (2011), Wallace and colleagues [17], Dvmys (2007) are consistent. To illustrate this alignment can be noted that the most important parameters in the preparation of the effective exercise behavior and people who prepare and record it on your own, family life of better conditions for sports the behavior of. According to the study, the efficacy and exercise behavior, and has a significant direct correlation. Students who had higher self-efficacy, physical activity had more. The results of similar studies in this area, the results are consistent. For example, research in the field of sports and efficacy relationship of model by Asad et al (1393) was made, represents a significant and positive relationship between the two variables. Self-efficacy as a mental construct, an important role in physical activity, and in some studies, the most powerful predictor of exercise behavior known (Buckworth & et al, 2002; Sullum & et al, 2000). Another finding of the study is the relationship between self students with athletic behavior. With the advance stages of change, increased self-efficacy students and the findings are consistent with the results of some studies and is consistent (Mohammadi & Mehri, 2012; Dumith & et al, 2007; Karimi & shajie, 2009; Prapavessis & et al, 2004; Nigg, 1998,). In this study, exercise behavior and self-efficacy scores were significantly different boys and daughter together. Male students compared to female students, are more self-efficacy and exercise behavior had more. Asadpour studies and colleagues (1393), Rychrt and colleagues (2007), Rodgers et al. (2008) and Mahmoud et al (2008) Efficacy in men than women. In conjunction with these results can be pointed to several factors. Of the factors that are involved in achieving these results can be physiological differences between men and women is noted.

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## References

1. Asadpoor, M. Fatollahi, M. Gujani, R. Razi, S. Torkashvand, F. Bahador, S. Survey on Physical Exercise Among Paramedical Students of Rafsanjan University of Medical Sciences Based on Stages of Changes Model and Its Association with Self-Efficacy. *Journal of Rafsanjan Medical Science University*; 2014; 13(7): 349-360.
2. Bandura A. Health promotion by social cognitive means. *Health Education Behav* 2004; 31(2): 143-64.
3. Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
4. Buckworth J, Granello DH, Belmore J. Incorporating personality assessment into counseling to help college students adopt and maintain exercise behaviors. *J Coll Counseling* 2002; 5(1): 15-25.
5. D'Alonzo KT, Cortese LB (2007) An investigation of habitual and incidental physical activity among Costa Rican and Costa Rican American teenage girls. *Journal of Transcultural Nursing*. 18(3):201-207
6. Dumith S, Gigante D, Domingues M. Stages of change for physical activity in adults from Southern Brazil: a population-based survey. *International J Behav Nutr Phy Act* 2007; 4(1): 25
7. Fairclough S et al (2012) 'Am I able? is it worth it? adolescent girls' motivational predispositions to school
8. Farmanbar R et al (2013) Predicting exercise behavior in Iranian college students: Utility of an integrated model of health behavior based on the transtheoretical model and self-determination theory. *Health Education Journal*. 72(1):56-69
9. Loon JV, Frank L (2011) Urban form relationships with youth physical activity: implications for research and practice. *Journal of Planning Literature*. 26(3):280-308.
10. Meriwether RA et al (2008) Clinical interventions to promote physical activity in youth. *American Journal of Lifestyle Medicine*. 2(1):7-25.
11. Mohammadi M, Mehri A. Application of the Transtheoretical Model to Predict Exercise Activities in the Students of Islamic Azad University of Sabzevar. *J Alborz Health* 2012; 1(2): 85-92 [farsi]
12. Nigg CR, Courneya KS. Transtheoretical model: Examining adolescent exercise behavior. *J Adolesc Health* 1998; 22(3): 214-24.
- physical education: associations with health-enhancing physical activity. *European Physical Education Review*. 18(2):147-58.
13. Prapavessis H, Maddison R, Brading F. Understanding exercise behavior among New Zealand adolescents: A test of the Transtheoretical Model. *J Adolesc Health* 2004; 35(4): 346. 17-27.
14. Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *Am J Health Promot* 1997; 12(1): 38-48.
15. Reichert FF, Barros AJ, Domingues MR, Hallal PC. The role of perceived personal barriers to engagement in leisure-time physical activity. *Am J Pub Health* 2007; 97(3): 515-
16. Rodgers WM, Wilson P, Hall C, Fraser S, Murray T. Evidence for a multidimensional self-efficacy for exercise scale. *Res Q Exerc Sport* 2008; 79(2): 222- 34.
17. Roesch SC et al (2009) Latent growth curve modeling of adolescent physical activity testing parallel process and mediation models. *Journal of Health Psychology*. 14(2):313-325.
18. Schwarzer, R. (1992). *Self-efficacy: Thought control in action*. Washington, D.C: Hemisphere.
19. Schwarzer, R. (1997). General perceived self-efficacy in 14 cultures. Retrieved from: <http://www.yorku.ca/faculty/academic/schwarze/world14.htm>.
20. Schwarzer, R., & Fuchs, R. (1996). Self- Efficacy and health behaviors. In Conner & Norman, P. (Eds.), *Predicting health behavior: Research and practice with social cognition models*. UK: Open University Press.
21. Siu-kau, C., & Stephen, Y. K. (2000). Effects of self-efficacy and social support on the mental health conditions of mutual-aid organization members. *Social Behavior and Personality*, 413-422
22. Spencer L, Adams TB, Malone S, Roy L, Yost E. Applying the trans-theoretical model to exercise: a systematic and comprehensive review of the literature. *Health Promotion Practice* 2006; 7(4):

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