



ISSN: 2456-0057  
IJPNPE 2019; 4(1): 540-542  
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www.journalofsports.com  
Received: 01-11-2018  
Accepted: 04-12-2018

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## Invigorating self-efficacy in adolescent female through selected mixed martial art practices

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### Abstract

The study was focused on psychological strengthening of adolescent female through mixed martial arts activities. Thus, to serve the purpose effect of mixed martial arts activities was assessed on self-efficacy variable of adolescent female. A sample comprising sixty (N=60) adolescent female volunteers with age range from 13-17 years were selected with purposive random sampling from LSD Senior Secondary School, Hoshiarpur, Punjab. For the collection of data randomly selected sample was divided into two groups namely treatment group comprises of thirty female (N=30) and control group thirty (N=30). The treatment groups had gone through one-hour self-defense programme three days a week for twelve weeks whereas, controlled group was not given any of the training. Self-efficacy Scale by Dr. Arun Kumar Singh and Dr. Shruti Narrain (2014) was used to assess self-efficacy of the female volunteers chosen for this study. Paired t' test was applied to statistically analyze the collected data. Obtained result depicted a significant improvement in self efficacy of adolescent female. It was concluded that mixed martial art activities prove to be beneficial for improving the self-efficacy of adolescent female.

**Keywords:** Female, empowerment, self-efficacy, self-defense, training

### Introduction

It was said by Swami Vivekanand, "The best measuring device to assess the development of a country is by its behavior for its females". Human being has progressed a lot right from the stone age to twenty first century but female still faces the same fear of rape, eve teasing and harassment which force them to decide a course of action to defend themselves in threatening situations. While residing in a society of violence against female has to be ready to employ many defensive tactics to avoid the unwanted situation. She must learn self-protecting skills but it really does a little to compete female's horror of violence (Burrow 2012) [3]. Sexually harassing and assaulting can cause female to dissociate from their own physiques, upsetting vertical joining of the psyche and body that makes up a person full of health. Powerful and repeated activities increase testosterone status and decrease cortisol status, modifying neural chemistry which gives enhancement to confidence, strengthened self-concept, and more opportunities to succeed.

It was observed that those who keep on judging themselves inefficacious while coping with environmental stresses usually dwell on their personal shortcomings and lose their confidence (Bandura, 1977) [1]. Self-efficacy is the belief that one can successfully perform in a given situation Bandura, (1986) [2]; Gist, (1987) [7] subsequently higher self-efficacy related with higher persistence that creates and develop self-concept of capacities that becomes influential to the goal achievement and quality of perceptions affect their motivation and performance. Most of the times 'people with high efficacy attribute failure to effort and with low self-efficacy attribute failure to ability (Peths and Dhar, 1999) [9] but majority of the people influence their behavior through self-regulatory mechanism (Bandura,1986) [2] and these mechanisms are best known as self-observation, self-evaluation, and self-reaction. Self-evaluation mostly involves sub process like self-concept, self-esteem and values.

It was remarked that female feel inveterately not strengthened as men and this can be cured by modification in their physical gesture at the time of a danger, which leads to a concrete result of behavior which will strengthen them. They must learn how to incorporates learning, how to use various parts of body weapons, objects other than body as weapons, the voice as a weapon

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to avoid an assault to occur. Though, the types of self-defense training vary from program to program in the areas of training model, duration of training, complexity of training, environment of training, trainer’s experience, and period allotted to practice the various skills (Cummings, 1992) [5] but must learn and participate to feel empowered.

While scanning literature it was observed that good number of the studies have been conducted on female empowerment but the key focus laid on political empowerment, economic empowerment and social empowerment. To bridge this gap investigator took this study to explore and reach some corner of reality.

**Objectives of the study**

To find out the effect of selected mixed martial art activities on self-efficacy of adolescent female.

**Hypothesis of the study**

It was hypothesized that there is a significant effect of mixed

martial art activities on self-efficacy of adolescent female.

**Design of the study**

Two group randomized pre and post design was used to carry out the study. Sample comprised of Sixty (N=60) female volunteers from LSD Senior Secondary School, Hoshiarpur, Punjab. Two groups of 30 each were assigned as experimental and control group. Experimental group was given 12 weeks intervention of mixed martial art activities for 3 hours a week for 12 weeks whereas, control group was not exposed to any type of training.

**Statistical analysis**

With the help of SPSS software, Mean, Standard Deviation and Paired t’ test was used to statistically analyze the data. The significance level was set at 0.05.

**Discussion of Results and findings**

**Table 1:** Mean and Standard Deviation measuring self-efficacy of treatment and control group during Pre and Post test

Self-Efficacy	N	Pre-Test Mean	SD	SEM	Post-Test Mean	SD	SEM
Treatment Group	30	72.86	5.63	1.02	77.56	5.04	0.92
Control Group	30	73.33	4.42	0.80	73.50	4.61	0.84

Table no. 1 represents the values of mean and standard deviation based on pre and post test conducted on treatment and control group to measure the effect of self-defense activities on self-efficacy of adolescent women. The Table depicts mean, standard deviation in regard with pre-intervention value of psychological variable of self-efficacy is

72.86 and 5.63 respectively whereas 77.56 and 5.04 respectively for post intervention test. The control group shows mean, standard deviation in regard with pre-intervention value of psychological variable of self-efficacy as 73.33 and 4.42 respectively whereas 73.50 and 4.61 respectively for post intervention test.

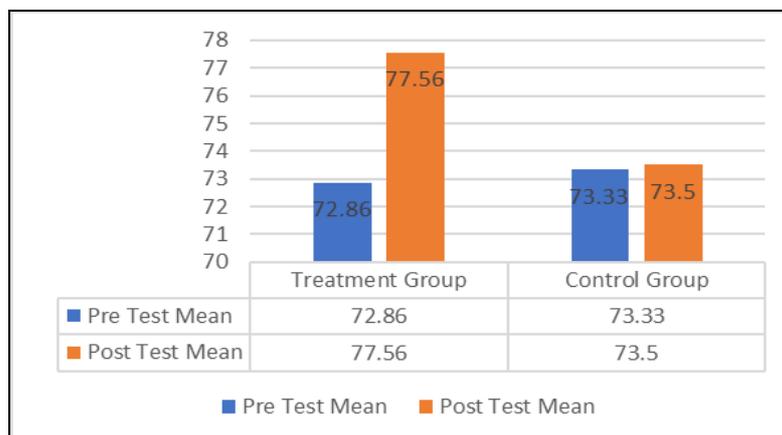
**Table 2:** Comparison of differences between the Pre and Post-tests Paired Means of Treatment group and Control group measuring Self-Efficacy of Adolescent women

Self-Efficacy		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
Pair	Group				Lower	Upper			
Pair 1	Treatment Group Pre-Post	-4.70000	2.53459	.46275	-5.64643	-3.75357	-10.157	29	.000
Pair 2	Control group Pre –Post	-.16667	3.22793	.58934	-1.37200	1.03866	-.283	29	.779

**Note:** p-value <.05 indicates significant difference and t’ value is 2.04.

The paired difference clearly shows mean and standard deviation difference in treatment group as 4.70 and 2.53 whereas control group shows mean and standard deviation difference of 0.16 and 3.22 respectively. The result found shows a significant difference in pre and post intervention data of treatment group where the calculated t-value 10.15 is higher than the table value of t’ i.e. 2.04 and in control group calculated value of t’ is 0.28 which is lower than the table

value of t’. Since the p value for treatment group is 0.00 which is significant at 0.05 level of significance and p value of control group is 0.77 and is higher than the 0.05 significance level which fails to be significant. Thus the research hypothesis H(1) “There is a significant effect of self-defense activities on self-efficacy of adolescent women” stands accepted.



**Fig 1:** The paired difference clearly shows mean and standard deviation difference in treatment group

### Discussion of the results

The results have advocate that mixed martial art activities has significant effect on self-efficacy of the sample taken for the study. The results of the present study are in line with the results of Ozer and Bandura (1990) <sup>[8]</sup> which depicted that teaching women in protection skills like self-defense significantly improved the status of self-efficacy related to the internal capability to tackle forceful attack or rape. The findings of this study offered further support the findings of Cox and Margit (1997) <sup>[4]</sup> than it facilitates efficacy expectations for real life situations. The study also replicated the results of Shim and David J (1998) <sup>[10]</sup>, Weitleuf *et al* (2000) <sup>[11]</sup>, David *et al.* (2006) <sup>[6]</sup> regarding positive change in self efficacy.

### Conclusions

Any type of crime against female like bullying, molestation, rape, physical violence or any such kind has become an epidemic. Such unwanted situation can happen to any of the human being. It is a harsh reality. Female must learn physical survival skills to cope with such kind of unwanted scenario. These skills will not only make her less vulnerable but also improve self-efficacy, assertiveness and confidence of adolescent female with higher persistence. She can repel attacks effectively and also inculcate and foster self-concept of capacities that becomes influential to the the aim the go for and regulate the environment. These perceptions affect their motivation and performance; 'people with high efficacy attribute failure to effort and with low self-efficacy attribute failure to ability (Pethe and Dhar, 1999) <sup>[9]</sup>. Thus, the investigator suggests to make mixed martial arts activities a compulsory subject for female adolescents so they can stand up to someone who may try to put them in compromising situation live and live without fear and with their head held higher.

### References

1. Bandura A. Self efficacy: towards a unifying theory of Behavioral change. *Psychological Review*. 1977; 2:191-215.
2. Bandura A. *Social foundation of Thought and action: A Social Cognitive Theory*, Engelwood cliffs, New Jersey: Prentice Hall, 1986.
3. Burrow Sylvia. Protecting one's commitments: integrity and self defense. *Journal of Applied Philosophy* 2012; 26(1).
4. Cox, Margit. Women's self-defense training: An applied analysis of self-efficacy theory. Unpublished dissertation, Loyola University, 1997.
5. Cummings N. Self-defense training for college women. *Journal of American College Health*. 1992; 40:183-188.
6. David WS, Simpson TL, *et al.* A pilot curriculum of self-defense and personal safety training for female veterans with PTSD because of military sexual trauma. *Journal of Interpersonal Violence*. 2006; 21(4):555-565
7. Gist ME. Self-Efficacy: Implications for organizational behavior and human resource management. *Academy of management review*. 1987; 12:472-85.
8. Ozer E, Bandura A. Mechanisms governing empowerment effects: a self efficacy analysis. *Journal of Personality and Social Psychology*. 1990; 58(3):472-486.
9. Peths S, Dhar U. *Occupational Self efficacy*, Mineograph, Indore: PIMR, 1999.
10. Shim DJ. Self-defense training, physical self-efficacy,

body image, and avoidant behavior in women. *Dissertation Abstracts nternational*. 1998; 58(8):4472B.

11. Weitleuf JC, Smith RE *et al.* Generalization effects of coping-skills training: Influence of self-defense training on women's efficacy beliefs, assertiveness, and aggression. *Journal of Applied Psychology*. 2000; 85(4):625-633.