

Effect of a Prescribe Exercise Programme on Regular Female Gym Goers on Selected Psychological Variables

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ABSTRACT

Purpose: To determine the effect of a prescribe exercise programme on regular female gym goers on selected psychological variables i.e. stress, commitment, risk taking and will to win.

Subjects: Total 100 regular gym goers' age ranged between 25 to 40 years were selected as a from different fitness centres by using purposive sampling technique.

Design: The Subjects were randomly and equally distributed into experimental and control group (N= 50 in each group) respectively.

Statistical Technique: Descriptive statistics, ANCOVA, and post-hoc (LSD) test were applied to compare both group. The level of significance was set at 0.05 level.

Result: significant effect of prescribed exercise programme were found on selected psychological variables i.e. stress, commitment, risk taking and will to win.

Conclusion: The prescribed exercise programme improves the mental well-being of regular female gym goers'.

Keywords: Exercise Programme, Mental well-being, Gym Goers'.

INTRODUCTION

The competitive environment prevailing in today's society, paucity of time, work responsibilities, and uncertain future; Develops emotional or physical problems, which has increased the prevalence of unhealthy lifestyles while eroding social support. Additionally, people's changing lifestyles lead to increased feelings of annoyance, dissatisfaction and psycho-social stress. As a result, people are started to experience stress in their daily activities and personal life.

According to Pestonjee and Singh (1987), job satisfaction and stress are associated among managers of private sector organisations. Further, Mathew (1986) argued that some strains are necessary for creativity. Furthermore, Srivastav and Singh (1987) found a link between stress and accountability in banking and insurance supervisors. Moreover, Hans (1976) reported that mild workplace stress has a positive or stimulating effect that can boost effort, inspire creativity, and promote dedication in one's work.

Caplan (1975) and Kahn (1973) described that experiencing conflict, boredom, anxiety, or sadness as a result of job stress has negative psychological effects. Further, Daley (1979) stated burnout is another result of behavioural and social stresses brought on by work stress. Additionally, Mangione and Quinn (1975) founded drinking while working, performing subpar work on purpose, and purposefully harming property, equipment, or products are other negative behaviours.

Further, DiLorenzo et al. (1999) documented that exercise can stimulate the sympathetic nervous system and thereby decrease depression and stress. Furthermore, Norvell & Belles (1993) found that circuit weight training shows reduced physical symptoms, anxiety, melancholy, and aggressiveness while also increasing mood and job satisfaction. Health benefits of improving body composition are possible as well.

Moreover, Spangler et al. (1998) also founded that the high waist-hip ratio and a high body mass index (BMI) are associated with stress and bad mood, respectively.

Though, National Institute for Health and Clinical Excellence(2008)also prescribed that 8-10 strength training exercise (8-12 repetitions of each exercise) should be performed twice a week. However, ACSM (2007) recommended that

adults should perform vigorously strenuous cardio activity for 20 minutes per day, three days per week, or moderate cardio (aerobic) activity for at least 30 minutes per day, five days per week.

Today, urban India is more concerned with lifestyles diseases like stress, diabetes, cancer, cardiovascular and obesity related problems steaming from unhealthy diets, smoking, alcohol intake, lack of regular exercise, increasing stress and competition at work as well at home and smaller families.

India today is more concerned with lifestyle-related illnesses like stress, anxiety, diabetes, cancer, cardiovascular, and obesity-related issues brought on by poor diets, alcohol consumption, smoking, lack of regular exercise, rising stress levels, competition at work and at home, and smaller families. Further, rapid economic development in nations like India has a significant impact on how we live and pass away. There have been some striking changes as a result of the improving healthcare system and the expanding economy. But there is always a doubt about the optimum lifestyle, workouts, training plans, or training programs for a given group of people, although the rise in health consciousness among middle- and high-income families in India. As a result, the researcher is inspired and guided to pursue this project in order to uncover and evaluate how people's lifestyle choices affect their health and fitness.

Purpose

The Purpose of the study was to analyse the effect of a prescribe exercise programme on regular female gym goers' on selected psychological variables namely Stress, Commitment, Risk Taking and Will to Win.

Hypotheses

There will be a significant positive effect of prescribed exercise programme on the female participants of experimental group participants on the selected psychological variables i.e. Stress, commitment, risk taking and will to win.

METHODOLOGY

Design: Cross sectional study design was consisting of equal numbers of experimental group and control group (n = 100regular gym goers' females and 50 subjects in each group).

Selection of Subject: A total of one hundred (100) regular female gym goers' subjects age ranged between 25-40 years were selected as subjects from fitness centres by using purposive sampling technique.

Subjects were randomly distributed in two groups i.e. Experimental Group and Control Group. Each group contain fifty subjects (50) respectively. Further, the experimental group subjects were perform the prescribed exercise programme while the control group subjects performed random exercise in their fitness centres.

Selection of Variables

The selected psychological variables for the study were-

Dependent Variable-Stress, Commitment, Risk Taking and Will to Win

Independent Variable- Prescribed exercise programme

Criterion Measure

The response given on the developed questionnaires such as stress, commitment, risk taking and will to win in the form of scores were considered as criterion measures for this study.

Collection of Data

The data on the selected psychological variables i.e. stress, commitment, risk taking and will to win were collected by using self-made questionnaire by the researcher.

Statistical Technique

The collected data of regular female gym goer's experimental and control group on selected psychological variables i.e. stress, commitment, risk taking and will to win were analyzed by using descriptive statistics, ANCOVA, and post-hoc (LSD) test were applied. The level of significance was set at 0.05 level.

Table-1.0 Analysis of Selected Psychological Variable (i.e. Stress, Commitment, Risk Taking and Will to Win) between Experimental and Control Groups of Regular Female Gym Goers'

N=100

Variable	Group	Mean		Degree of Freedom		Tabulated F Value	F-ratio
		Experimental	Control	Between Group	Within Group		
Stress	Pre Test	67.7	69.56	1	98	3.94	1630.36*
	Post Test	50.66	68.84				
	Adjusted Post Test Mean	51.07	68.42	1	97		
Commitment	Pre Test	52.38	52.08	1	98	3.94	1352.88*
	Post Test	64.06	52.60				
	Adjusted Post Test Mean	63.99	52.66	1	97		
Risk Taking	Pre Test	58.72	59.14	1	98	3.94	964.91*
	Post Test	71.44	59.50				
	Adjusted Post Test Mean	71.62	59.32	1	97		
Will to Win	Pre Test	61.34	59.20	1	98	3.94	894.49*
	Post Test	70.78	59.00				
	Adjusted Post Test Mean	69.83	59.95	1	97		

*Significant at 0.05 level. $F_{0.05}(1, 97) = 3.94$

Table-1.0 highlights the experimental group pre test mean of psychological variable stress (67.7), experimental group pre test mean of psychological variable commitment (52.38), experimental group pre test mean of psychological variable risk taking (58.72), and experimental group pre test mean of psychological variable will to win (61.34) of regular female gym goer's. Further, the table highlights the control group pre test mean of psychological variable stress (69.56), control group pre test mean of psychological variable commitment (52.08), control group pre test mean of psychological variable risk taking (59.14), and control group pre test mean of psychological variable will to win (59.2) of regular female gym goer's. Furthermore, the table highlights the experimental group post test mean of psychological variable stress (50.66), experimental group post test mean of psychological variable commitment (64.06), experimental group post test mean of psychological variable risk taking (71.44), and experimental group post test mean of psychological variable will to win (70.78) of regular female gym goer's. Moreover, the table highlights the control group post test mean of psychological variable stress (68.84), control group post test mean of psychological variable commitment (52.60), control group post test mean of psychological variable risk taking (59.50), and control group post test mean of psychological variable will to win (59.00) of regular female gym goer's. Similarly, the table also highlights the experimental group adjusted post test mean of psychological variable stress (51.07), experimental group adjusted post test mean of psychological variable commitment (63.99), experimental group adjusted post test mean of psychological variable risk taking (71.62), and experimental group adjusted post test mean of psychological variable will to win (69.83) of regular female gym goer's. Additionally, the table highlights the control group adjusted post test mean of psychological variable stress (68.42), control group adjusted post test mean of psychological variable commitment (52.66), control group adjusted post test mean of psychological variable risk taking (59.32), and control group adjusted post test mean of psychological variable will to win (59.95) of regular female gym goer's. Likewise, the analysis of co- variance ANCOVA of selected physical psychological variables between experimental and control group of regular female gym doers' as indicated in table no – 1.0 were found to be significantly on stress, commitment, risk taking and will to win as the obtained F – value of stress (1630.36), commitment (1352.88), risk taking (964.91) and will to win (894.49) were higher than the required value of 3.94 at 0.05 level of confidence. Thus, significant

difference was found between the experimental and control group on muscular stress, commitment, risk taking and will to win after the pre and post-test.

Further, the graphical representation of selected Psychological variables i.e., stress, commitment, risk taking, and will to win of pre-test and post-test mean of control and experimental group on stress variable are shown in figure no. 1.0, 1.1, 1.2, and 1.3 respectively.

Table- 1.1 Paired Adjusted Post Test Means and Mean Difference between the Means of Experimental and Control Group Regular Gym Goers’ on Selected Psychological Variables

Variables	Paired Adjusted Post Test Mean		Mean Difference	Critical Difference
	Post Experimental	Post Control		
Stress	51.07	68.42	-17.35*	0.58
Commitment	63.99	52.66	11.33*	0.43
Risk Taking	71.62	59.32	12.30*	0.55
Will to win	69.83	59.95	9.88*	0.42

Table 1.1 indicate the mean difference between experimental groups and control groups of regular female gym goers’ on Selected Psychological Variables. Further, table reveals that the critical difference selected psychological variable i.e. stress, commitment, risk taking and will to win between post experimental group and post control group have greater than 0.05 i.e. 0.58, 0.43, 0.55 and 0.42 respectively. Furthermore, the mean difference between post experimental group and post control group on stress was -17.35 which indicate after completing prescribe training programme the stress level was reduces among the experimental group participants. Similarly, the mean difference between post experimental group and post control group on commitment, risk taking and will to win was 11.33, 12.30 and 9.88 respectively which reveals that commitment, risk taking and will to win were increases among the participants after the prescribe training programme.

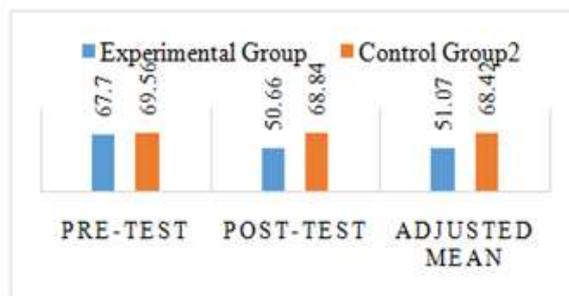


Figure –1.0 Graphical Representation of Pre-test and post-test Mean of Control and Experimental Group on Stress Variable

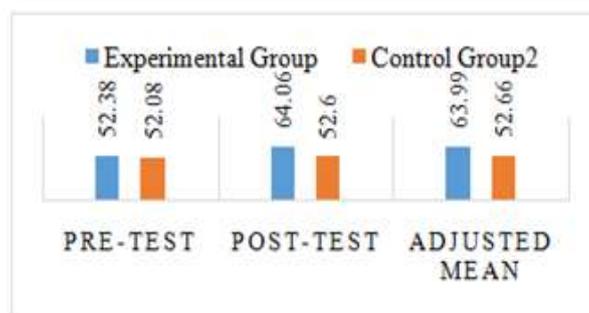


Figure – 1.1 Graphical Representation of Pre-test and post-test Mean of Control and Experimental Group on commitment Variable

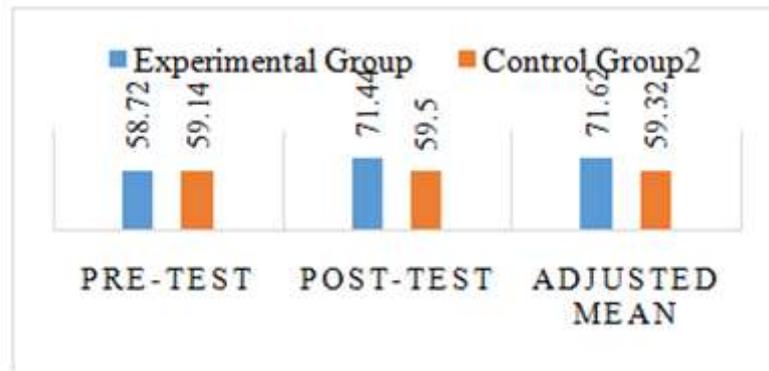


Figure –1.2 Graphical Representation of Pre-test and post-test Mean of Control and Experimental Group on Risk Taking Variable

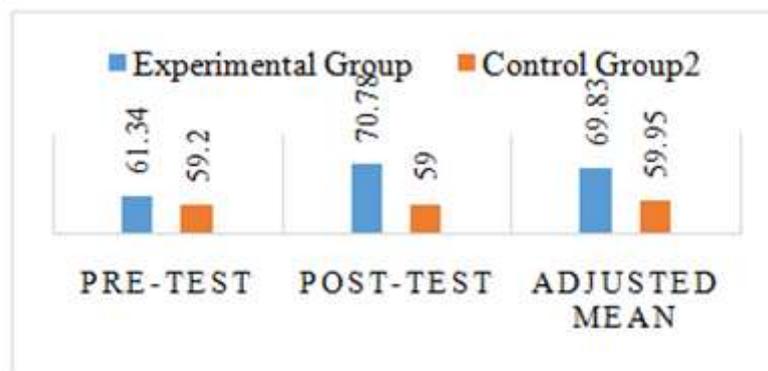


Figure – 1.3 Graphical Representation of Pre-test and post-test Mean of Control and Experimental Group on Will to Win Variable

DISCUSSION OF FINDINGS

This study was conducted to determine the effect of a prescribe exercise programme on regular female gym goers on selected psychological variables i.e. stress, commitment, risk taking and will to win. The descriptive statistics of table-1.0 exhibited that the control group were reported higher mean value on stress. While experimental group participants were reported higher mean values on commitment, risk taking and will to win respectively. Further, the analysis of ANCOVA revealed significant difference between experimental and control group on stress, commitment, risk taking and will to win variables at 0.05 level of confidence, from table no. – 1.0. Additionally, a post-hoc analysis revealed that the experimental group participants' stress levels decreased after completing the prescribed training programme. Likewise, after completing the required training programme, participants in the experimental group showed higher levels of commitment, risk-taking, and winning motivation than the control group participants. Such a significant difference between the experimental and control groups participants reported because the experimental group participated in a strict and regimented fitness regimen in a structured setting under the supervision that was specifically created and developed for enhancing physical and mental performance at work. Conversely, the participants in the control group did not follow any form of predetermined programme.

Further, the significant difference on stress was founded due the fact that Cardio-respiratory fitness moderates the stress response lowering resting heart rate, blood pressure. Furthermore, Cooper (1986) & DeVries et al. (2000) supported this with their finding that cardio-respiratory fitness keeps heart rate and epinephrine levels lower and rising more slowly and by increasing beta-endorphin levels during and after exercise. Moreover, Norvell & Belles (1993) also reported that circuit weight training not only improve strength, but also increase mood and job satisfaction, decrease physical symptoms, anxiety, depression, and hostility in law enforcement officers. Similarly, the results of the study are in consonance with the results of Judy et.al. (2012); Mastura et.al (2012); Long et.al. (1995); Norris et.al. (1990).

In the same way, constant demands of competence, professional devotion, excellence, adjustment, social lives, and problem-solving behaviour to sustain physical health and mental balance and alertness. In that order, the findings on commitment were also supported by the results of Lu et. al. (2007); Güleriyüz et.al. (2008); Sibley et.al. (2010) Boni (2004);Beyrouiti (2011) respectively.

Likewise, the significant difference on risk taking is due to the fact that exercise releases endorphins, which counteract the massive rush of adrenaline that enters bloodstreams during dangerous situations with cool, calm thinking and the capacity to offer vital concerns your full attention despite the mayhem around you. Further, the results of the study were supported by results of Beyrouiti (2011); Sibley et.al. (2010)Turner et.al. (2010); Güleriyüz et.al. (2008);Boni (2004); Storseth (2007); Nicholson et.al. (2005) respectively.

Moreover, the significant difference was reported on will to win is due to the fact that workers moderate exercise improves the will to perform the task efficiently by less energy expenditure. Further, the improved cardiovascular fitness tends to execute more work with improved work quality. The similar results were reported in the study of Chang et.al. (2010);McAuley et.al. (2010); Hyde et.al. (2010); Tamim et.al. (2009); Ntoumani et.al. (2005); White et.al. (2003);Fox (1999);Ohta et.al. (2004). respectively.

CONCLUSION

The findings of this study reported a significant difference on their psychological variables i.e., stress, commitment, risk taking and will to win respectively among regular female gym goers'. Further, on the basis of the results and findings of this study, it was concluded that recommended exercise programmes improves the mental well-being of regular female gym goers'.

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