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THE INFLUENCE OF EXERCISE ON PHYSICAL AND MENTAL FITNESS OF EXERCISING YOUNG MALES

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ABSTRACT

Exercising affects the individual behaviors and lifestyle. The opportunity for exercise available to each person with respect to social and economical surroundings may become manage to change the eating and sleeping patterns and in majority of cases show a burst of activity when overall outcomes of exercising were compared with non-exercising individuals. Randomized Performa based study was conducted on 207 young males who were exercising, going gym regularly for weight loss or physical fitness. After exercising 79% of the regularly exercising males felt fresh, relaxed and less frustrated on day to day issues. Moreover 71% were got less irritated when compared with non-exercising males. Significant and improved mental and physical fitness was achieved through the combination of exercise and diet in regularly exercising young subjects, although no differences were found based on different exercise durations and intensities in this group and majority of the males were reported to exercise only to achieve fitness as their primary goal rather than to loose weight or build body.

Key-words: Exercise, physical and mental fitness, males, behaviour, life style.

INTRODUCTION

Physical and mental health can be benefited or changed after and also sluggish down the process of aging **(**Alford, 2010). The constructive role of physical exercise helps to prevent range of clinical conditions (Lennox *et al*., 1990 & Mondin *et al*., 1996). Clinician often prescribes physical exercise for both mental and physical health benefits, but there are certain risks that are likely to soothe the process of exercise induced psychological health (Cramer *et al*., 1991, Frederick *et al*., 1996; Reid *et al*., 1983). The gendered differences with respect to physical activity cannot be excluded as men like to do exercise and sport as daily routine. Fortunately, this picture may be changing rapidly but at the same time the relation between exercise and problems with body image should not be ignored (Koff *et al*., 1997), for either gender. Despite significant gains in public acceptance and participation women are still more likely to engage in non-competitive activities such as aerobics and keep fit which in turn may serve to reinforce the cult of thinness and feminity (Cramer *et al*., 1991) There is a tendency among women to focus on their body as style statement whereas traditionally men have been more likely to attend to the energetic aspects of their bodies harmonization, potency and pace (Sonstroem *et al*., 1996). When social physique anxiety (SPA) correlates with self presentational motives for exercise such as weight control and attractiveness is higher among women, they consistently score higher than men on measures of self confidence with regard to their bodies and physical competence (McAuley *et al.*, 1995; Morris *et al*., 1990), numerous studies have investigated the mood enhancing properties of exercise and have shown that exercise can indeed have a positive influence on mood state, that individuals may self report an improvement in mood states without a corresponding improvement being detected but the psychometric test of mood and confirmed a relation between exercise and positive moods (Morgan *et al*., 1971), with significant effect sizes being shown for all six subscales of the profile of mood states (POMS) (Mc Donald *et al*., 1991). However, more recent research suggests that this relation may be quite complex and demands further clarification, and emphasizes on the option that any kind of increments related to physical activeness is independent mood. There also an overall impact of acute and chronic aerobic exercise (Steptoe *et al*., 1988) and has been shown to be associated with significant positive mood changes at different level (Mc Donald *et al*.,1991; Maroulakis *et al*.,1993). various forms exercise, both aerobic and anaerobic, can be associated with an elevation of mood state, particularly for clinical samples, The nature of these mechanisms, whether psychosocial, psychological, psychopharmacological or psycho-physiological, has yet to be understood (Timonen *et al*., 1971).

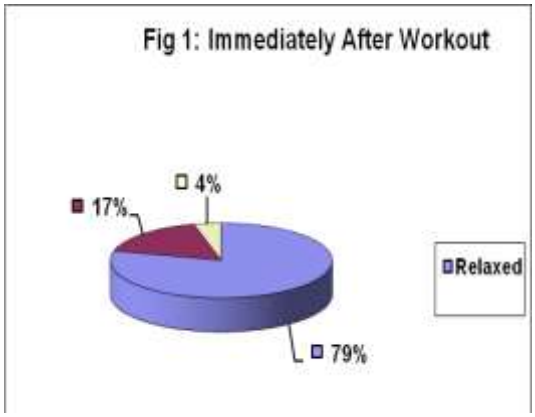
This study has been undertaken to compare the effects of exercise among trained and un-trained subjects and also to understand eating, sleeping and behavioral fitness in exercising young males. Moreover, we also compared the beneficial effects of exercise in regularly exercising young male subjects.

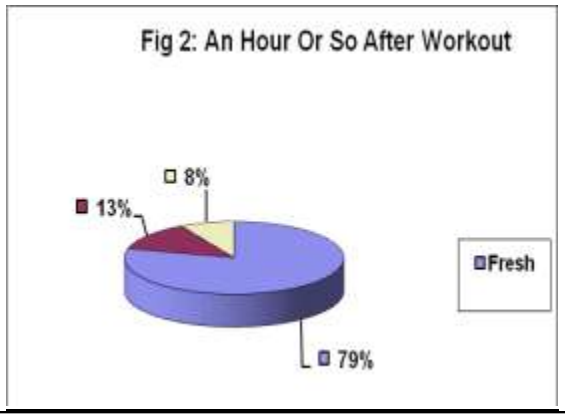
METHODOLOGY

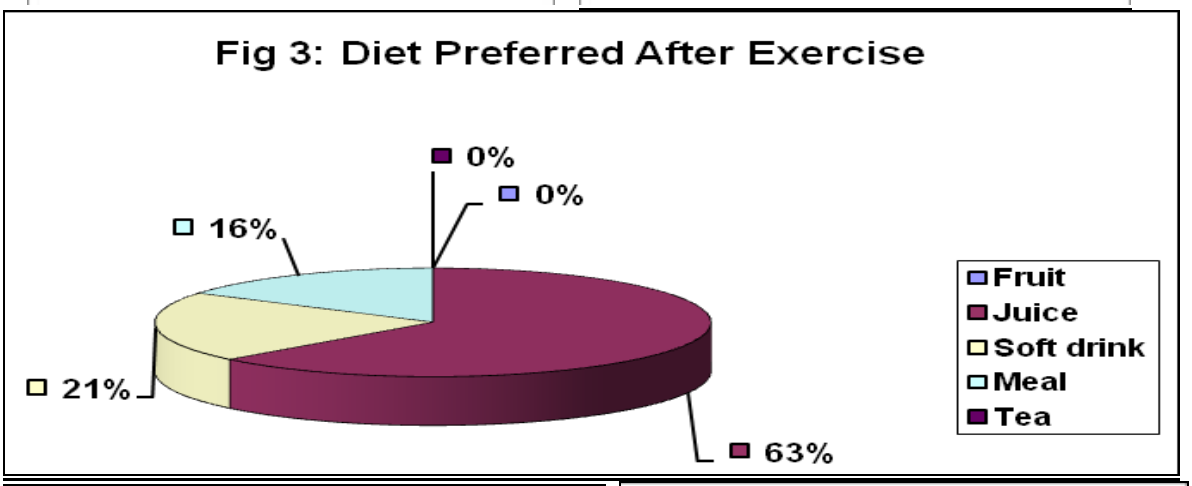
Randomized Performa based study was conducted involving 207 young males who were exercising, going gym regularly for weight loss or physical fitness. The questionnaire was based on the queries regarding duration of exercise, exercising history, use of drugs including caffeine, nicotine or power enhancing, the type of meal they prefer to take before or after exercise, feel after workouts and the overall effects that have ever experienced after workouts.

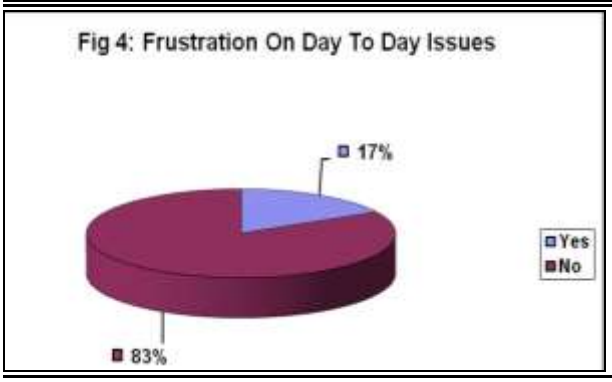
RESULTS AND DISCUSSION

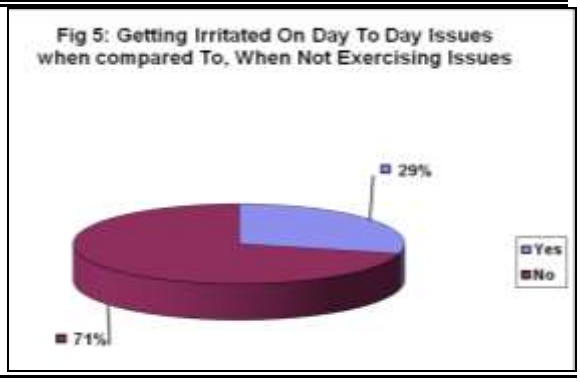
After exercising 79% of the regularly exercising males felt fresh after their workouts(FIG 2) & even 79% felt relaxed (FIG 1) while 13% felt tired & 17% felt exhausted which is less in comparison of healthy effects(FIG 1 &2)











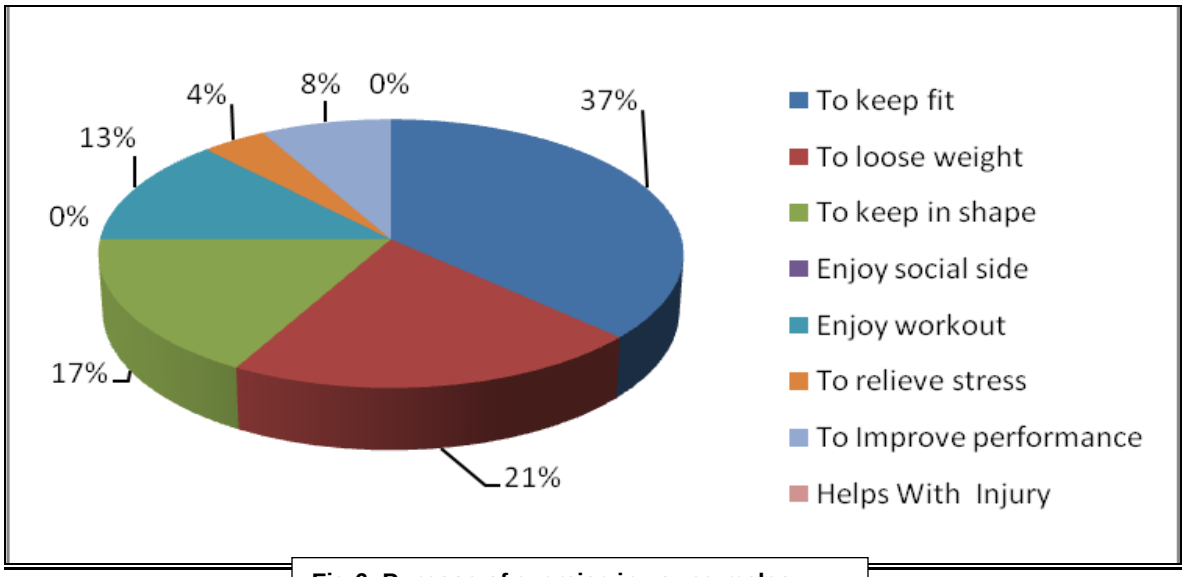


Fig.6: Purpose of exercise in young males

Participating in physical activities is the key to a healthy lifestyle, is a well-established fact for ages now (Biddle *et al*., 1994). People of all age groups are advised by the health practitioners to indulge in physical activities. These activities may range from vigorous walking to jogging, from games to workouts. All such activities aim at promoting a much healthier state of a human being. Our research revealed that exercising effect health conditions (Fig. 1 & 2) and may be effecting to prevent the population from the risk of heart disease, dementia, stroke, type 2 diabetes, depression, obesity and high blood pressure (Maroulakis *et al*., 1993) as most of the individuals feels fresh and more relaxed after their workouts.. People who take regular exercise could reduce their risk of developing various physical and mental health conditions supported by Individuals have an element of control over some of these factors, including obesity, diet, smoking and physical activity. Although the focus of our study was on men's health, the research is beneficial for physical activity of both sexes and relevant to all age groups. Regular moderate to intense physical activity is associated with decreased risk of coronary heart disease and ischemic and hemorrhagic stroke (Hartung, 1995; Sinyor *et al*., 1986). A growing body of evidence suggests that increasing physical activity can also reduce the risk of certain types of cancers, osteoporosis, type 2 diabetes, depression (Reid and Yen, 1983), obesity (Hartung, 1995) and high blood pressure (Sinyor *et al*., 1986) . It is evidenced by our study that exercising males become less frustrated and irritated on day to day issues since they have been involve in exercising (Fig. 4 & 5). The other beneficial effects of physical activity in the primary prevention and management of cancer is growing and there is an association between higher levels of physical activity and lower cancer death rates. Research has found that walking or cycling for at least an half-an-hour a day is associated with a reduction in cancer (Powell *et al*., 1994) and that when this is increased to an hour cancer incidence falls by (Head *et al*., 1996) . Evidence is mixed when it comes to specific cancers (Pate *et al*., 1995). Research has shown a strong relationship between increased physical activity and reduced colon cancer in both sexes. And men who are more active at work—not just sitting at a desk—have a lower rate of prostate cancer. Other cancer studies show that physical activity after diagnosis can aid recovery and improve outcomes (Sonstroem *et al*., 1996). Studies have also shown that men who are physically active are less likely to experience erection problems (Folkins *et al*., 1981). There is growing evidence that physical activity could decrease the risk of dementia in the elderly (Sexton *et al*., 1989). We have also focused on the fact of increasing interest in exercising lifestyle and inclination of populations towards daily workouts and was observed that most of the young male population emphasizes on healthy lifestyle and to maintain pace and shape of their body (Fig.6).

CONCLUSION & RECOMMENDATIONS

Significant and improve mental and physical fitness was achieved through the combination of exercise and diet in regularly exercising young subjects, although no differences were found based on different exercise durations and intensities in this group and majority of the males were reported to exercise only to achieve fitness as their primary goal rather than to lose weight or build body. Ideally, to gain maximum health benefits people should exercise, not

smoke, eat a healthy diet, the more of these healthy traits an individual has, the less likely they are to develop a range of chronic disorders. Even if people can't give up smoking and maintain a healthy weight, they can still gain health benefits from increasing the amount of regular exercise they take. Our research suggests that men and women of all ages should encourage, being more physically active for the sake of their long term health (Fig.6).

REFERENCES

Alford, L. (2010). What men should know about the impact of physical activity on their health**.** *International Journal of Clinical Practice*; 64 (13): 1731

Biddle, S., M. Goudas and A. Page (1994). Social-psychological predictors of self-reported actual and intended physical activity in a university workforce sample. *Br J Sports Med*., 28(3): 160-163.

Cramer, S.R., D.C. Nieman and J.W. Lee (1991). The effects of moderate exercise training on psychological well-being and mood state in women. *J. Psychosom. Res*., 35 (4-5): 437-449.

Folkins, C. H. and W.E. Sime (1981). Physical fitness training and mental health. Am Psychol.; 36(4): 373-389.

Frederick CM, Morrison CS. *(*1996) Social physique anxiety: personality constructs, motivations, exercise attitudes, and behaviors. *Percept Mot Skills.*, 82: 963–97.

Hartung G.H. (1995). Physical activity and high density lipoprotein cholesterol. *J Sports Med Phys Fitness.*, 35(1): 1–5.

Head, A., M.J. Kendall, R. Ferner and C. Eagles (1996). Acute effects of beta blockade and exercise on mood and anxiety. *Br J Sports Med.*, 30(3): 238–242.

Koff, E. and C.L. Bauman (1997). Effects of wellness, fitness, and sport skills programs on body image and lifestyle behaviors. *Percept Mot Skills*, 84(2): 555–56.

Lennox, S.S., J.R. Bedell and A.A. Stone (1990). The effect of exercise on normal mood. J Psychosom Res., 34(6): 629–636.

Maroulakis, E. and Y. Zervas (1993). Effects of aerobic exercise on mood of adult women. *Percept Mot Skills,* 76: 795–801.

Martinsen, E.W. (1990). Benefits of exercise for the treatment of depression. *Sports Med.*, 9(6): 380–389.

McAuley, E., S.M. Bane, D.L. Rudolph DL, *et al*. (1995). Physique anxiety and exercise in middle-aged adults. *J Gerontol B Psychol Sci Soc Sci*., 50: 229–35.

McDonald, D.G. and J.A. Hodgdon (1991). *The psychological effects aerobic fitness training: research and theory*. New York: Springer-Verlag,

Mondin, G.W., W.P. Morgan, P.N. Piering, A.J. Stegner, C.L. Stotesbery, M.R. Trine and M.Y. Wu (1996). Psychological consequences of exercise deprivation in habitual exercisers. *Med Sci Sports Exerc.*, 28(9): 1199–1203.

Morgan, W.P., J.A. Roberts and A.D. Feinerman (1971). Psychologic effect of acute physical activity. *Arch Phys Med Rehabil*., 52(9): 422.

Morris, M., H. Steinberg, E.A. Sykes and P. Salmon (1990). Effects of temporary withdrawal from regular running. *J Psychosom Res*., 34(5): 493–500.

Pate, R.R., M. Pratt, S.N. Blair, W.L. Haskell, C.A. Macera, C. Bouchard, D. Buchner, W Ettinger, G.W. Heath A.C. King *et al*. (1995) Physical activity and public health. A recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *JAMA.*, 273(5): 402–407.

Powell, K.E. and S.N. Blair (1994). The public health burdens of sedentary living habits: theoretical but realistic estimates. *Med Sci Sports Exerc*., 26(7): 851–856.

Reid, R.L. and S.S.C. Yen (1983). The premenstrual syndrome.*Clin. Obstet Gynecol*., 26: 710–18.

Sexton, H., A. Maere and N.H. Dahl (1989). Exercise intensity and reduction in neurotic symptoms. A controlled follow-up study. *Acta Psychiatr Scand*., 80(3): 231–235.

Sinyor, D., M. Golden, Y. Steinert and P. Seraganian (1986). Experimental manipulation of aerobic fitness and the response to psychosocial stress: heart rate and self-report measures. *Psychosom Med.*, ;48(5): 324–337.

Sonstroem, R.J. and S.A. Potts (1996). Life adjustment correlates of physical self-concepts. *Med Sci Sports Exerc.*, 28(5): 619–625.

Steptoe, A. and S. Cox (1988). Acute effects of aerobic exercise on mood. *Health Psychol.*, 7(4): 329–340.

Timonen, S. and B.J. Procopé (1971). Premenstrual syndrome and physical exercise. *Acta Obstet Gynecol Scand.*, 50(4): 331–337.

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