The International Journal of Indian Psychology
ISSN 2348-5396 (e) | ISSN: 2349-3429 (p)
Volume 7, Issue 1,DIP: 18.01.097/20190701
DOI: 10.25215/0701.097
http://www.ijip.in | January- March, 2019

Research Paper

Physical Activity: An Intervention Technique for Mental Well-Being

Geeta Khanwani[1]*

ABSTRACT

Modern era is well-known for its sudden shift in lifestyle which leads to "metabolic syndromes" or commonly known as "lifestyle disorders". These disorders majorly affect the metabolic system of the body which gives birth to many physical as well as mental disorders. Due to its drastic encounter with the population, it becomes an eye-catching issue for many researchers and practitioners working in various fields. Life-style factors like diet, exercise, sleep, etc has been taken in consideration while providing a therapeutic intervention to an individual. Sedentary lifestyle is one of the most leading causes of metabolic syndromes. Due to sedentary lifestyle, brain is losing its efficacy which leads to many brain pathologies as well as mental disorders like stress, anxiety, depression etc. The aim of this paper is to highlight the role of physical activity on mental health and well-being

Keywords: *Physical Activity, Technique, Mental Well-Being*

In this quintessential era, lifestyle modification is rapidly taking place which leads to an exponential growth of various "metabolic syndromes". These syndromes are not only limited to the physical hindrances but also has a power to affect the mental well-being of an individual. As there is enough data available to show a positive link between physical health and lifestyle factors but researchers are still working with regard to mental health (Richardson, Faulkner, McDevitt, et al. 2005). In today's time, several evidence studies have been done to find the link between lifestyle factors and mental well-being. Out of many lifestyle factors, physical activity is one of the most significant factors due to which mental health is being affected (Callaghan, 2004).

Physical activity refers to any bodily movement by skeletal muscles which requires energy expenditure like while working, playing, carrying any household activity, etc. On the other side, exercise is a sub-category of physical activity, which referred as a planned, structured, repetitive and targeted or focused physical activity to maintain or improve one or more components of physical fitness. It has been found that moderate to vigorous amount of exercise helps to improve overall health of an individual. It is recommended that children of age 5-17 years should do at least 60 minutes of daily moderate to vigorous physical activity, adults of age 18-64 years must get involve in physical activity for at least 150 minutes per

[1]Clinical Psychology, Manipal University, Jaipur, Rajasthan, India
*Responding Author

Received: February 1, 2019; Revision Received: March 12, 2019; Accepted: March 18, 2019

week of moderate intensity physical activity or 75 minutes per week of vigorous intensity physical activity and adults of age 65 years or above can also follow the same recommendation of adults age 18-64, but in case of poor mobility it is must for older adults to do any physical activity for at least 3 days in a week (WHO, 2015).

Mental well-being refers to an individual's ability to develop their fullest potential, work creatively and productively, build strong and positive relationships with other and contribute to their community (Beddington, Cooper, et al., 2008) It involves feeling optimism, satisfied, having high self-esteem, control in one 's life, purpose in life, sense of belongingness and support (The Scottish Government, 2012). Mental well-being can get disturb by intense, frequent, long-lasting negative emotions like disappointment, grief, dissatisfaction, etc. Recent researches are inclining towards promoting mental well-being over mental illness or mental health problem. In short, mental well-being can simply be described as absence of symptoms of diagnosed mental illness.

A simple way to enhance our mental well-being is by getting involve in physical activity. Many reports are showing positive and strong relationship between physical activity and mental well-being. Some reports are also showing positive impact of physical activity on few mental illnesses (Edmunds, Biggs and Goldie, 2013).

Link Between Physical Activity and Mental Well-Being

A study was conducted on Korean adults (n=6510) aged 18-64 years, to find the relation between physical activity and mental health. Using several tools like International Physical activity Questionnaire, Composite International Diagnostic Interview, Epidemiological Studies Depression Scale, and General Health Questionnaire. Subjects were categorised into three categories- Inactive, minimally active and health enhancing physical active (HEPA). In result analysis, it was found that Subjects who were health enhancing physical active and minimally active were less likely to be classified as depressed or psychologically distressed than inactive subjects (Park, Cho, et al., 2011).

Another study in Finland was done, in which 3403 participants (1856 women and 1547 men) were taken who was fallen under the age group 25-64 years. In this study, along with investigating the effect of physical exercise on physiological well-being, psychological well-being was also taken in consideration. To assess the effectivity of physical exercise on psychological well-being, following tools were taken- survey questionnaire regarding exercise habits and perceived health and fitness, Beck Depression Inventory, Cynical Distrust Scale, State-Trait Anger Scale and Sense of Coherence Inventory. By the result analysis of this cross-sectional study, it was found that individuals who exercised at least twice or thrice a week shows significantly less depression, anger, stress, and cynical distrust than those who exercise less frequently or inactive in nature. It was concluded that exercise has positive correlation with psychological well-being (Hassmen, Koivula & Uutela, 2000).

A gender-specific variation study was done in Belgium to assess the effect of recommended amount of physical activity on mental well-being in general population. A population sample 6803 of aged 25-64 years were taken using Belgian National Health Survey. Using multiple logistic regression analyses, it was found that there is a positive association between physical activity intensity & mental well-being (Asztalos, Bourdeaudhuij, & Cardon, 2010).

Physical Activity as an intervention for Mental Well-being

Physical activity has a great potential to enhance overall well-being of general population as well as in some aspects of clinical population. Even a small 10 minutes brisk walk helps to enhance mental alertness, lifts up mood states, and brings enlighten to overall well-being (Edmunds, Biggs & Goldie, 2013).

1. **State of Mood: -**Mood can be defined as temporary state of mind. Individual's everyday experiences leads to fluctuation in various mood states. Everyone tries to keep the balance or uplift the negative state of mind into positive for this they might indulge in activities like eating their favourite food, going out somewhere and so on (Thayer, 1996). But these are temporary solutions which cannot bring permanent fixation of the problem. To have a balance or positive state of mind permanently one has to indulge in some physical activity. Many studies have shown the effectivity of physical exercise in uplifting the state of mood. It has been proved that people with higher level of involvement into physical activity has shown positive state of mind like energetic, enthusiastic, optimism and many more, compared to individuals who are inactive in nature (Pasco, Jacka, Williams, Brennan, Leslie & Berk, 2011). In a review of studies, it was found that regular aerobic exercise results into positive state of mood. It was also found that negative mood state at the baseline converted into positive mood state due to the effect of regular aerobic exercise. Results also shown that, effectivity of higher exercise frequency and lower exercise intensity leads to optimal mood upliftment. It was recommended to indulge in 30-35 minutes of low intensity exercise per week for at least 10-12 weeks to get the positive state of mind (Reed & Buck, 2009).
   Another study was done on the participates to compare the state of mind when they are physically active and inactive. It was found that, they feel more active and positive during the state of physically active as compare to that of inactive. It was also found that mood upliftment shows great inclining when mood baseline is quite low (Kanning & Schlicht, 2010).Even in some studies it is found that walking for at least 10-20 minutes is sufficient for upliftment of mood (Ekkekakis, Hall, VanLanduyt & Petruzzello, 2000).
2. **Stress: -** In a recent surveystudy conducted by Mental Health Foundation found that around 59% of British adults reported that they felt more stress in their lives as compared to five years ago. Out of all survey, 47% respondents reported that they felt stressed almost every day and on the other side, 24% respondents said they felt stressed in every few days (Mental Health Foundation, 2013). Stress causes body to release more and more of emergency or fight and flight hormones, commonly known as adrenaline or noradrenaline. These hormones prepare the body for an emergency condition due to which bodily changes like high blood pressure, palpitation, perspiration, lower stomach activity and reduce blood flow to the skin commonly occurs. Along with that body also produce cortisol which in turn releases fat and sugar in the blood stream to ease the way for body in the emergency condition. In everyday condition like traffic jam when we are heading towards our work, busy working schedules and so on, there is no way to fight or flight and because of this these stress hormones are of no use. Overtime when level of stress continues to shoot up it leads to serious damage to overall health of an individual. Common symptoms like nausea, headache, perspiration, indigestion, breathe more quickly, suffer from various aches and pains. Long-term stress leads to more chronic conditions like feeling of strain, worry, insomnia, exhaustion and increased risk of metabolic disorders like strokes and heart attacks. People finds many alternatives to deal with stress like alcohol, smoking etc which leads to more chronic health conditions (Edmunds, Biggs & Goldie, 2013). To

conquer the effect of stress a healthy approach is physical activity. Many cross-sectional studies have found that individuals who are engage in physical activity are having lower stress as compared to that of inactive individual (Aldana, Sutton, Jacobson & Quirk, 1996) (Kouvonen, Kivimaki, Elovainio, Virtanen, Linna & Vahtera, 2005). It also has been suggested by several studies that efficiency of physical activity in effect of stress regulation like controlling blood pressure, regulating breathing pattern etc, or enhanced recovery from effect of stress. That's why physical activity in the context of stress is also known as "stress buffering." Many studies had been done in past which have shown mixed results. Further studies have to be conducted to find the intensity of physical activity which can be used as an effective stress management tool (Gerber & Puhse, 2009).

3. **Depression: -**Depression varies from mild to severe in intensity. Along with psychiatric or psychological treatment, physical activity can be an intervention treatment for depression. It is cost-effective and does-not have any stigma attached to it as in case of anti-depressants or counselling (Chalder, Wiles, Campbell, Hollinghurst, Haase, Taylor, et al. 2012). In a recent review of 30 randomised controlled trails, concluded that exercise helps to improve depressive symptoms present in depression diagnosed individuals when compared to that of individual with no treatment or controlled intervention (Rimer, Dwan, Lawlor, Greig, McMurdo, Morley, et al., 2012). In several review studies, it is concluded that exercise is an effective intervention for depression either independently or in combination of medication or psychological treatment (Perraton, Kumar & Machotka, 2010). In several it is also concluded that, if patient chooses the intensity of physical activity it is more effective than intensity of workout prescribed to him (Callaghan, Khalil, Morres & Carter, 2011).
4. **Anxiety: -**Similar to depression, physical activity also plays as an intervention role in case of mild to severe anxiety. In a review of 19 intervention studies, which had been done on the healthy adults to see the effect of physical activity. It was concluded that increasing physical activity in this group results into reducing anxiety. On further investigation of these studies revealed that moderate to high intensity level of physical activity is more effective in conquering or reducing anxiety (Conn VS, 2010). Another review of 49 randomised controlled trails which had investigated the effect of physical activity on anxiety in non-clinical and clinical populations. It was found that anxiety reduced significantly due to physical activity compared to that of no-treatment control groups (Wipfli, Rethorst & Landers, 2008). In a recent study done on patients of various types of clinical anxiety were randomly assigned CBT and home-based walking or CBT and educational sessions. It was concluded that there was a significant reduction in anxiety in patients with home-based walking as compared to that of without exercise group (Merom, Phongsavan, Wagner, Chey, Marnane, Steel, et al., 2008). Several small studies were done on the effect of physical activity on various types of anxiety, it was concluded by them that there is a positive effect of physical activity on reducing the symptoms of anxiety (Asmundson, Fetzner, DeBoer, Powers, Otto & Smits, 2013).
5. **Dementia and cognitive decline in older adults: -**Due to healthcare facilities life-expectancy has been inclining in toady's time. On one side due to raise in life expectancy leads to serve population over 65 years of age, but on the other side same population group are the target of life threating disease like dementia and cognitive decline which cannot be cured by any treatment method. And eventually they lead to decline in quality of life (Edmunds, Biggs, & Goldie, 2013).

Dementia: It has been suggested that physical activity during the life-span have positive effect on cognition and protective effect on developing dementia in later years of life

(Martinez (in press). Evident studies had suggested that all types of exercise are effective in nature but it seems that higher intensity level of exercise is more effective than the lower level. It has been suggested that at least twice- thrice or more per week of exercise has beneficial effects on cognition of an individual (Larson, Wang, Bowen, McCormick, Teri, Crane, et al., 2006). In recent studies it had been found that moderate level of exercise is more effective than the higher or lower level (Geda Ye RROKDS & et al., 2010). In several another study was done on individual's with developed dementia found that physical activity has an effective role in delaying and reducing the severity of symptoms of dementia (Martinez (in press).

Cognitive Decline: -Researchers were interested to know the effect of physical activity on cognitive decline in older adults with no dementia. In a review of 15 studies which followed individual's over 1 to 12 years it was concluded that physical activity had a protective role towards cognitive decline. It was also found that people who participated in higher levels of physical activity at baseline experienced lower risk of cognitive decline than individual's having sedentary life-style (Sofi, Valecchi, Bacci, Abbate, Gensini, Casini, et al., 2011). Due to mixed results of various types of studies, experts suggested more research work under this category to prove a strong evidence to support an intervention therapy (Snowden, Steinman, Mochan, Grodstein, Prohaska, Thurman, et al., 2011).

Impact of physical activity which can be helpful for better mental well-being

1. **Physiological adaptations: -** Many researchers believed that exercise leads to release endorphins via brain. Endorphins helps to regulate mood, it has properties like morphine and heroin. Several studies have found that level of endorphins increased in the blood of individuals following exercise. But to prove this hypothesis more evident studies are required. With the development of new approaches in the neuroscience and increased understanding of how brain functions it has been clear that changes in the state of mind is due to the complex chemical interaction between multiple neural circuits. Advances in brain imagining technique require more further investigation for providing more clear evidences to describe the relation between exercise and mood or state of mind (Dishman & O'Connor, 2009). In new researches it has been found that physical activity improves brain plasticity or brain's capacity to produce new neurons or to develop new neural pathways during adulthood. Major changes had been shown by two main areas of brain that is, hippocampus and frontal cortex. Due to changes in brain plasticity, physical activity also plays major role in improving or reducing the effect of neuro-cognitive disorders like dementia (Erickson, Gildengers& Butters, 2013).
2. **Improvement in sleep pattern: -**In the recent report published by Mental Health foundation on importance of sleep and mental health well-being, revealed that around one-third of the population may suffer from insomnia. Due to insomnia individual may feel fatigue, negative mood, inability to perform well in tasks, inattention, inability to concentrate, and so on. (Robotham, Chakkalackal & Cyhlarova, 2011). In recent survey study conducted on 3081 adults revealed that higher physical activity is positively associated with good quality of sleep, due to which there were fewer reports of overly sleepy during the day or inability to concentrate on work when tired (Loprinzi & Cardinal, 2011). In some researches it was found that people with problems in initiating or maintaining sleep gets relief from physical activity. In a single moderate aerobic session of 50 minutes, it was found that level of sleep quality increased and there was reduction in pre-sleep anxiety (Passos, Poyares, Santana, Garbuio, Tufik & Mello, 2010). On a 6 months physical activity intervention (50 minutes three times per

week), it was found that there was a significant increase in the level of sleep quality as well as reduction in negative mood states like tension, anger and depression (Passos, Poyares, Santana, D'Aurea, Youngstedt, Tufik, et al., 2011).

3. **Mastery Experience: -** At a psychological level, individual experiences state of mastery while involving in any physical activity. Completion of any physical activity give rise to sense of mastery and individual beliefs in his ability to control his environment which eventually leads to positive well-being, boost confidence level, high self-esteem and so on. Exercise also helps individual to gain control in his everyday lives as it boosts their confidence level, self-esteem, feeling of mastery, and influence on their body image (Johnston, Reilly & Kremer, 2011). In a controlled study conducted on 19 women having depression, it was found that 9 weeks exercise programme helped them in bringing sense of mastery as well as feeling of confidence to get engage in coping responses. Hence, level of depression reduced due to exercise (Craft, 2005). In another research it was also concluded that due to physical activity feeling of mastery occurs which may counteract with the negative styles of thinking in anxious individuals (Asmundson, Fetzner, DeBoer, Powers, Otto & Smits, 2013). Hence, physical activity intervention provides an opportunity to enhance sense of mastery and well-being (Edmunds, Biggs & Goldie, 2013).
4. **Inclination in Social Interactions: -**Physical activity is also an effective tool to build social relationships and enhance sense of well-being. Physical activity involves social interactions like engaging in group activity, sharing same interest etc, which helps individual to form a good social network. A good social network helps in enhancing confidence, boost positive mental health and well-being. Several studies had been done which shows that there is a positive relation between good social interaction and mental health and well-being. It had been also found that good social interactions work as a protective factor for mental health and well-being. Social relationships can come across in form of taking part in group or work as a team, sharing same areas of interest, or by taking part in activities in which more people are required. Social relationships bring out sense of belongings, friendship, and supportive peer relationships and so on. It is important for all age groups throughout the life course for better mental health and well-being. It also plays an important role in isolated individuals; it boosts their competence and confidence level. Hence, physical activity also helps in building social networks and boosting mental health well-being (Heaney & Israel, 2008).

CONCLUSION

In this paper, an overview on importance of physical activity has been provided. Several evident studies had been quoted which has shown that physical activity can be an intervention technique for mental well-being. Physical activity not only provided beneficial effects to non-clinical population but also to the clinical population.

Through this paper few recommendations or suggestions can be given for future references. It has been suggested that further researches must be done to prove a strong evidence for physical activity as an intervention therapy especially in clinical population. Also, it had been observed that there is a need to clear the level of intensity, duration and type of physical activity which provides more beneficial effects to the population.

Overall, physical activity is considered to have more positive effects and no side-effects. So, everyone in the population should get engage in any type of physical activity. Physical activity should be part of every individual of all age groups across the lifespan. Also, government policies are required to bring back active lifestyle again in population's lives.

REFERENCES

Aldana SG, Sutton LD, Jacobson BH & Quirk MG (1996). Relationships between leisure time physical activity and perceived stress. Perceptual and Motor Skills, 82 p. 315-21.

Asmundson GJG, Fetzner MG, DeBoer LB, Powers MB, Otto MW & Smits JAJ (2013). Let's get physical: a contemporary review of the anxiolytic effects of exercise for anxiety and its disorders. Depression and Anxiety, p. n/a-n/a

Asztalos, M., Bourdeaudhuij, I. D., & Cardon, G. (2010). The relationship between physical activity and mental health varies across activity intensity levels and dimensions of mental health among women and men. Public Health Nutrition, 13, 1207-1214. doi:10.1017/S1368980009992825

Beddington J, Cooper CL, Field J, Goswami U, Huppert FA, Jenkins R, et al. (2008). The mental wealth of nations. Nature, 455(7216) p. 1057-60.

Callaghan P, Khalil E, Morres I & Carter T (2011). Pragmatic randomised controlled trial of preferred intensity exercise in women living with depression. BMC Public Health, 11 p. 465.

Callaghan P.. Exercise: a neglected intervention in mental health care? J PsychiatrMent Health Nurs. 2004;11:476–483.

Chalder M, Wiles NJ, Campbell J, Hollinghurst SP, Haase AM, Taylor AH, et al. (2012). Facilitated physical activity as a treatment for depressed adults: randomised controlled trial. BMJ, 344 p.

Conn VS (2010). Anxiety outcomes after physical activity interventions: meta-analysis findings. Nursing Research, 59 p. 224-31.

Craft LL (2005). Exercise and clinical depression: examining two psychological mechanisms. Psychology of Sport and Exercise, 6 p. 151-71.

Dishman RK & O'Connor PJ (2009). Lessons in exercise neurobiology: The case of endorphins. Mental Health and Physical Activity, 2 p. 4-9.

Edmunds, D., Biggs, H., & Goldie, I. (2013). Let's Get Physical. Retrieved from https://www.mentalhealth.org.uk/sites/default/files/lets-get-physical-report.pdf

Ekkekakis P, Hall EE, VanLanduyt LM &Petruzzello SJ (2000). Walking in (affective) circles: Can short walks enhance affect? Journal of Behavioral Medicine, 23 p. 245-75.

Erickson KI, Gildengers AG & Butters MA (2013). Physical activity and brain plasticity in late adulthood. Dialogues in clinical neuroscience, 15(1) p. 99.

Geda Ye RROKDS & et al. (2010). Physical exercise, aging, and mild cognitive impairment: A population-based study. Archives of Neurology, 67 p. 80-6.

Gerber M &Puhse U (2009). Do exercise and fitness protect against stress-induced health complaints? A review of the literature. Scandinavian Journal of Public Health, 37 p. 801-19

Hassmen, P., Koivula, N., &Uutela, A. (2000). Physical Exercise and Psychological Well-Being: A Population Study in Finland. Preventive Medicine, 30, 17-25. doi:10.1006/pmed.1999.0597

Heaney CA & Israel BA (2008). Social networks and social support. In: Glanz K, Rimer BK, Viswanath K, editors. Health behaviour and health education: theory, research, and practice. 4th ed. San Francisco: Jossey-Bass. p. 189-210.

Johnston O, Reilly J & Kremer J (2011). Excessive exercise: From quantitative categorisation to a qualitative continuum approach. European Eating Disorders Review, 19 p. 237-48.

Kanning M &Schlicht W (2010). Be Active and Become Happy: An Ecological Momentary Assessment of Physical Activity and Mood. Journal of Sport & Exercise Psychology, 32 p. 253-61.

Kouvonen A, Kivimaki M, Elovainio M, Virtanen M, Linna A &Vahtera J (2005). Job strain and leisure-time physical activity in female and male public sector employees. Preventive Medicine, 41 p. 532-9.

Larson EB, Wang L, Bowen JD, McCormick WC, Teri L, Crane P, et al. (2006). Exercise is associated with reduced risk for incident dementia among persons 65 years of age and older. Annals of Internal Medicine, 144 p. 73-81. Epub 2006/01/19.

Loprinzi PD & Cardinal BJ (2011). Association between objectively-measured physical activity and sleep, NHANES 2005– 2006. Mental Health and Physical Activity, 4 p. 65-9.

Martinez JT (in press). Dementia and Alzheimer's Disease. In: Clow A, Edmunds S, editors. Physical activity and mental health. Champaign, IL: Human Kinetics.

Mental Health Foundation (2013). How to manage and reduce stress. London.

Merom D, Phongsavan P, Wagner R, Chey T, Marnane C, Steel Z, et al. (2008). Promoting walking as an adjunct intervention to group cognitive behavioral therapy for anxiety disorders—A pilot group randomized trial. Journal of Anxiety Disorders, 22(6) p. 959-68.

Park, S., Cho, M. J., Cho, S. J., Bae, J. N., Lee, J. Y., Park, J. I., . . . Hong, J. P. (2011). Relationship Between Physical Activity and Mental Health in a Nationwide Sample of Korean Adults. Psychosomatics, 52(1), 65-73. doi: Retrieved from https://doi.org/10.1016/j.psym.2010.11.017

Pasco JA, Jacka FN, Williams LJ, Brennan SL, Leslie E & Berk M (2011). Don't worry, be active: positive affect and habitual physical activity. Australian and New Zealand Journal of Psychiatry, 45 p. 1047-52.

Passos GS, Poyares D, Santana MG, D'Aurea CVR, Youngstedt SD, Tufik S, et al. (2011). Effects of moderate aerobic exercise training on chronic primary insomnia. Sleep Medicine, 12 p. 1018-27.

Passos GS, Poyares D, Santana MG, Garbuio SA, Tufik S & Mello MT (2010). Effect of acute physical exercise on patients with chronic primary insomnia. Journal of clinical sleep medicine: JCSM: official publication of the American Academy of Sleep Medicine, 6 p. 270-5.

Perraton LG, Kumar S &Machotka Z (2010). Exercise parameters in the treatment of clinical depression: a systematic review of randomized controlled trials. Journal of Evaluation in Clinical Practice, 16 p. 597-604.

Reed J & Buck S (2009). The effect of regular aerobic exercise on positive-activated affect: A meta-analysis. Psychology of Sport and Exercise, 10 p. 58194.

Richardson CR, Faulkner G, and McDevitt J. et al. Integrating physical activity into mental health services for persons with serious mental illness. Psychiatr Serv. 2005 56:324–331.

Rimer J, Dwan K, Lawlor D, Greig C, McMurdo M, Morley W, et al. (2012). Exercise for depression. Contract No.: Art. No.: CD004366

Robotham D, Chakkalackal L & Cyhlarova E (2011). Sleep Matters. The impact of sleep on health and wellbeing. London: Mental Health Foundation.

Snowden M, Steinman L, Mochan K, Grodstein F, Prohaska TR, Thurman DJ, et al. (2011). Effect of exercise on cognitive performance in community dwelling older adults: review of intervention trials and recommendations for public health practice and research. Journal of the American Geriatrics Society, 59 p. 704-16. Epub 2011/03/29.

Sofi F, Valecchi D, Bacci D, Abbate R, Gensini GF, Casini A, et al. (2011). Physical activity and risk of cognitive decline: a meta-analysis of prospective studies. Journal of Internal Medicine, 269 p. 107-17.

Thayer RE (1996). The Origin of Everyday Moods. New York: Oxford University Press.

The Scottish Government (2012). Mental Health Strategy for Scotland 2012-15. Edinburgh.
Wipfli BM, Rethorst CD & Landers DM (2008). The anxiolytic effects of exercise: a meta-analysis of randomized trials and dose-response analysis. J Sport Exerc Psychol, 30 p. 392-410. Epub 2008/08/30.
World Health Organization (2015). "Physical Activity: Factsheet No. 385." Available at: http://www.who.int/mediacentre/factsheets/fs385/en/ [Accessed on 04/11/15].

Acknowledgements

The author(s) profoundly appreciate all the people who have successfully contributed in ensuring this paper in place. Their contributions are acknowledged however their names cannot be mentioned.

Conflict of Interest

The authors carefully declare this paper to bear not conflict of interests

How to cite this article: G Khanwani. (2019). Physical Activity: An Intervention Technique for Mental Well-Being. *International Journal of Indian Psychology*, *7*(1), 865-873. DIP:18.01.097/20190701, DOI:10.25215/0701.097