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EFFECTS OF TAI CHI CHUAN EXERCISE ON PHYSICAL AND MENTAL HEALTH OF GENERAL PUBLIC

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| KEYWORDS | ABSTRACT |
|---|---|
| Tai Chi Chuan, Physical & Mental Health, General Public | <p>The purpose of this study was to examine effects of Tai Chi Chuan, exercise in mind-body harmony, on general public perceptions of their physical and mental health. Two-month intervention of tai chi exercises was administered to general public and multidimensional physical (PHD) and mental (MHD) scores were assessed by using SF36v2 health survey questionnaire before and after intervention. In this study 286 people participated and took part in one-hour tai chi exercise twice week for 2 months. Normalized values of each variable and combined values of PHD and MHD before and after tai chi intervention were examined by using the paired t-test ($p < 0.05$). The physical measurements of BP and GH and mental, RE, VT, MH improved significantly after tai chi exercise intervention. When evaluating the total values of PHD or MHD, MHD better significantly. Results have narrated that tai chi exercises had positive effects on self-rated physical & mental health. Scores for mental health appeared to be sensitive to change. The schools, colleges/universities, and health centers might offer the tai chi as Part of ongoing physical activity programs available for students.</p> <p> 2022 Journal of Social Research Development</p> |
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INTRODUCTION

In today's hustle and bustle, many of us are too busy to take care of health until our health becomes an issue. Fortunately, modern medicine offers cure for several common illnesses (Zou, Han, Yeung, Hui, Tsang & Wang, 2019). Unfortunately, some are still incurable and often the basis of the disease is not corrected and therefore the disease reappears or manifests in other ways (Cetin, Erel & Aslan, 2020). Importance of Tai Chi Chuan lies in its potential to strengthen and repair the physical and energetic body, which gradually has potential to

prevent and cure diseases. This kind of exercise will assist you maintain strength, flexibility, and balance, and it may be right activity for remainder of your life. Tai chi chuan can scale back stress, anxiety, depression, and mood disorders and increase self-esteem (Guo, Qiu & Liu, 2014). Tai Chi Chuan is now a popular form of movement practiced by all age groups. In this connection, approximately 300 million people practice in more than 150 countries around the world. It was inscribed on United Nations Representative List of the Intangible Cultural Heritage of Humanity for Education, Science and Culture (UNESCO) on December 17, 2020. Consequently, Tai Chi Chuan is an art that encompasses the mind, body and thus also the spirit.

Tai Chi comes from ancient China and is one of most effective exercises for health of the body and mind and it is an art of great depth and skill, it is easy to discover and its health benefits are quickly realized. For many, it continues as journey of lifetime. In conventional Chinese medication and sports, Tai Chi performs completely critical position in selling the fitness and its useful results are widespread (Wayne 2013; Chen, Lan, Wong & Lai, 2013). As regular self-protection practiced in China for plenty years, Tai Chi is documented over its sluggish and sleek rhythmic change. In December 2020, United Nations Educational and Cultural Organization (UNESCO) introduced that Tai Chi could be blanketed with inside the Representative List of Intangible Cultural Heritage of Humanity (Cetin, Erel & Aslan, 2020). Tai Chi originated in China with inside the 18th century. In this studies we've got used the time period Tai-Chi to symbolize Tai-Chi Chuan and its associated activities. The definition of the time period Tai Chi comes from each Chinese Taoism and conventional Confucian philosophy (Li, Hong & Chan, 2001). A few hundred years ago, well-known past due Ming martial artist named Wang ting Chen systematically invented and proposed a machine of Tai-Chi theory.

Tai chi became executed throughout form of bureaucracy which can be named after diverse Chinese households which includes Chen, Yang, Wu, Sun. Distinctive patterns proportion many simple theories, however range in schooling strategies which includes posture, rhythm and sequence. Traditional Chinese medical theory places the highest value on prevention by correcting resistance before symptom occurs. If there is already loot, it is often planned by regular Tai Chi chuan practice before it causes major damage (Wang, Bannuru, Ramel, Kupelnick & Schmid, 2010). If the thing is already causing damage, drastic corrective action may need to be taken. Once damage is repaired, calm, slow and integrated movements of Taiji-quan are an excellent recovery. Over the beyond 4 decades, a developing quantity of research were stated at results of tai chi chuan at bodily and intellectual fitness of human beings of all ages, focusing at fitness blessings of tai chi for numerous persistent diseases (Bao, Liu, Zhu, Mo, & Cheng, 2011). Several systematic opinions have tested the efficacy of tai chi in the form of trouble and disease, including posture manipulate and prevention of falls, musculoskeletal disorders, cardiovascular and respiration diseases and the intellectual fitness problems.

However, few have handled worldwide statistics collection, estimation of evolving trends, and abstracting from the mindset of systematic visualization and bibliometric analysis. Thus, it's miles important to behavior this examine to study kingdom of artwork and replace the principle latest frontiers in Tai Chi research. Tai Chi improves stability and decreases falls, consistent with a few studies (Lan, Chen, Wong & Lai, 2013). Proprioception: cap potential to sense the location of the frame in area decreases with age. As a regular self-protection practiced in China for plenty years, Tai Chi is documented through its sluggish and sleek rhythmic transformation. Tai chi facilitates teach sense, which can be a feature of sensory neurons with inside the internal ear and stretch receptors in muscle groups and ligaments (Ngai, Jones & Tam, 2016). In this linking, Tai chi additionally improves muscle electricity and adaptability, making it less difficult to stumble. The fear of the falling can growth your possibilities of falling; Some research has proven that Tai Chi exercising facilitates lessen this anxiety. Thus, depending on the rate and length of the movements, tai chi might also additionally provide a few cardio benefits. So, practicing tai chi can lessen stress, anxiety, depression, and mood.

Objective & Significance

In Pakistan, overall, the physical and mental health of the people is not so good and sound. People are not willing to take part in regular physical exercise or make them as part of their life. Tai Chi is way of maintaining and enhancing physical health and it helps in preserving health through gentle movements of body, mind in a very comfortable and low intensity exercises in short time. In present study the positive effects of Tai chi on general people have been checked. In this connection, the main objective of this study was to assess the effects of Tai Chi Chuan among the general public in terms of physical and mental health dimensions.

LITERATURE REVIEW

We doing Tai Chi Chuan also can be changed to carry out in a sitting position. There are several research displaying that Tai Chi Chuan ends in higher health, decreased signs and symptoms of sickness and a hit aging. [Wayne 2013]. Tai Chi is a mild shape of motion and is a particularly top workout for people with osteoarthritis. It facilitates construct middle frame energy and improves decrease limb musculature. The millions of humans round the arena perform Tai Chi sporting events for the bodily and intellectual well-being [Ming, & Chuan, 2011]. Tai Chi is the completely unique form of movement that combines thinking and framework through series of ineffective movements. In this connection, this study provides exciting information about exam. College students can also benefit from regular Tai Chi practice. Because it can convey the emotional distress associated with the lifestyle stories of college graduates and students in different situations and contexts. You may remember that the university offered Tai Chi classes as part of ongoing physical recreation package for college students (Fuzhong, Peter, Edward, Duncan, Nigel & Fisher, 2001) toward desired outcomes.

A huge and effective consequences mentioned with inside the gift examine offer help for the broader adoption of Tai Chi as a fitness primitive pastime in more youthful individuals, and assist damage any stereotype of such pastime as an exercising solely for the advantage with inside the elderly. Tai chi improves the cognitive characteristic and fairly decreased physiological fall hazard in older adults with multiple-area a-MCI. Tai Chi can be especially useful to older adults with this condition [Thornton, Sykes & Tang, 2004]. There is mild to sturdy proof that shows that Tai Chi is powerful intervention to keep and enhance decrease limb proprioception in adults older than fifty-five years antique people [Zou, Han, Li, Yeung, Hui, Tsang & Wang, 2019]. The Tai Chi exercising might also additionally sell cardiovascular fitness and may be taken into the consideration as an opportunity exercising application for sufferers with CVD (cardiovascular disease). In this linking, Tai Chi benefits from random cardiovascular factors such as the hypertension, diabetes, dyslipidemia, decreased athletic performance, endothelial dysfunction, and depression (Chen, Lan, Wong, & Lai, 2013) in different situations.

Tai Chi Chuan is slight depth exercising this is useful to cardiorespiratory function, immune capacity, intellectual control, flexibility, and stability control; it improves muscle energy and decreases the hazard of falls with inside the elderly (Li, Hong & Chan, 2001). Tai Chi Chuan seems to have the physiological and psychosocial blessings and additionally seems to be secure and powerful in selling the stability control, flexibility, and cardiovascular health in older sufferers with continual conditions. Still, barriers or biases exist in maximum studies, and it's far tough to attract corporation conclusions approximately the blessings reported. Most symptoms wherein Tai Chi became carried out lack a theoretical basis regarding the mechanism of benefit (Li, Hong & Chan, 2001). Tai chi seems to be associated with reduced stress, improved psychological well-being such as anxiety, despair, and temperament, and increased self-esteem. Final conclusion was limited by design version, contrast, non-uniform effect, and poor control. High-quality, well-controlled, longer randomized trials are needed to inform better medical decisions (Wang, Bannuru, Ramel, Kupelnick & Schmid, 2010). Older people can lower variety of injurious falls with aid of using taking part in everyday application of Tai Chi.

Additional concomitant advantages of Tai Chi consist of advanced useful stability and bodily overall performance and decreased worry of falling, indicating the application of Tai Chi for retaining and selling fitness and useful mobility amongst older adults. The advantages of Tai Chi justify advocating long-time period practice. Tai Chi may be endorsed as a desired exercising for stability schooling and be robotically prescribed for older sufferers at chance for falling after the suitable screening (Li, Harmer, Fisher, Eckstrom & Wilson, 2005). Tai Chi workout education should lower blood strain and consequences in favorable lipid profile modifications and enhance subjects' tension status. Tai Chi may be used as an opportunity modality in treating sufferers with slight hypertension, with a promising financial effect (Tsai, Wang, Chan, Lin, Wang, Yang & Liu, 2003). Tai Chi Chuan had useful consequences for

sufferers with knee osteoarthritis that is, enhancing the knee extensor endurance, the cardio capacity, and frame stability and coordination and decreasing the frame weight and bone density loss. In this connection, there changed into inadequate proof to help that Tai Chi Chuan had useful intellectual impact on sufferers with knee osteoarthritis (Chang, Chen, Lee, Lin & Lai, 2016).

Tai Chi and traditional exercising applications have absurd results on stability and practical mobility in youngsters with the congenital sensor neural listening to loss. Still, no superiority of Tai Chi or traditional exercising applications become decided over the other. Both Tai Chi and traditional exercising claims can be used to enrich stability and practical mobility in youngsters with congenital sensor neural listening to loss (Cetin, Erel & Aslan, 2020). Tai Chi is slight depth workout this is useful to the cardiorespiratory function, immune capacity, intellectual manage, flexibility and stability manage; it rallies muscle power and decreases chance of falls with inside elderly. Evidence furnished over go sectional and longitudinal research shows that Tai Chi workout has results on cardiorespiratory and musculoskeletal function, posture manage capacity, and the discount of falls skilled through the elderly (Li, Hong & Chan, 2001). Tai Chi is contributing to areas of performance, biomedical research, and network fitness promotion through its current applications due to its historic awards and growing reputation for the fitness-enhancing capabilities. Thus, Tai Chi has the ability to optimize and enrich human fitness and well-being, based on its current popularity (Guo, Qiu & Liu, 2014).

The developing hobby with inside the studies network affords momentum for assessing its fitness blessings in stopping and treating persistent sicknesses amongst older adults in China and worldwide. Chinese students are in a completely unique function to transport Tai Quan studies to a brand new stage with inside the twenty first century, producing, with inside the process, clinical effects with intention to in long run effect international public fitness with aid of using lowering the weight of sicknesses and selling harmonic yin-yang stability in the fitness (Li, 2016). There is promising proof that conventional Chinese sports activities and PAs offer many fitness blessings for older adults. Thus, types of behavioral medicinal drug in number one and secondary prevention of illnesses a number of getting old Chinese populace will assist satisfy a pressing public fitness need (Guo, Shi, Yu & Qiu, 2016). The meta-evaluation supports tai chi exercise to increase the strength of the lower limbs of elderly. Meta-evaluation set that tai chi exercise increase ankle flexor/ extensor strength and knee extensor/flexor strength as measured by constant velocity dynamometer. After tai chi training, the limb muscle strength increased significantly (Bao, Liu, Zhu, Mo & Cheng, 2011).

Exercise is a prime element of rehabilitation for sufferers with cardiovascular disease. The blessings of cardiac rehabilitation (CR) exercising schooling consist of exercising tolerance enhancement, amelioration of CVD chance factors, development of mental wellbeing, and discount of mortality (Lan, Chen, Wong & Lai, 2013). The subjects who participated in tai chi

and CR confirmed greater balance, perceived physical health, and higher self-efficacy of tai chi compared to subjects who participated in CR alone. The consequences activist that Tai Chi may be without difficulty carried out with inside network putting or in CR facility and can offer extra exercising changes for cardiac sufferers (Wang, Taylor, Pearl & Chang, 2004). Colleges and universities would possibly remember imparting Tai Chi training as an aspect in their ongoing bodily interest applications to be had to college students (Wang, Lee, Wu, Benson, Wang & Yeung, 2014). The potential of Tai Chi to improve mental health and the ability to use it to intrude in people with variety of medical conditions. Tai chi intrusions have beneficial consequences for many over variety of mental health intrusions, including depression, anxiety, known pressure running and self-efficacy training (Wang, Bannuru, Ramel, Scott & Schmid, 2010).

METHODOLOGY

The one-group pretest-posttest design (experimental study design) was used in this study. The intervention constituted 2 months’ practice of one-hour session of the Tai chi (24 Yang form) exercise done twice a week. This study was conducted in Sports Complex, Liaqat Bagh Murree road Rawalpindi Pakistan. Participant sample consisted 286 individuals from general public (RaoSoft) both males and females having age between ten to forty years old, non-probability convenience sampling technique was used for the targeted sample. Pathologically injured or sick were excluded from the sample. Multi-dimensional SF-36V2 health survey questionnaire was employed to measure the physical and mental health of participants before and after the intervention. Consequently, paired t-tests was employed to examine the participant’s changes in physical and mental health perception with Tai Chi Chuan practice.

Tool Employed

The data derived from questionnaire replies was analyzed on SPSS comparative analysis software use version V27 of this software. To check the significance of data we use T-Test (statistical hypothesis test).

RESULTS OF STUDY

Table 1 Physical Functioning (Male & Female)

| N=286 | YES, limited | YES, limited | YES, Not limited |
|------------------------------|--------------|--------------|------------------|
| Before (Male Participants) | 90 | 40 | 30 |
| Percentage | 31.5% | 14% | 10.4% |
| After (Male Participants) | 22 | 30 | 108 |
| Percentage | 7.7% | 10.5% | 37.7% |
| Before (Female Participants) | 77 | 32 | 17 |
| Percentage | 26.9% | 11.3% | 5.9% |
| After (Female Participants) | 16 | 31 | 79 |
| Percentage | 5.6% | 10.8% | 27.7% |

The above table represented the response level of 286 (Male 160 (55.9%) and Female 126 (44.1%) participants who filled the questionnaire before and after Tai Chuan, analysis of data in table has been shown in terms of percentages and frequency counts with reference to the question asked by them related to QOL.

Before Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 90 (31.5%) opined Yes Limited a lot, 40 (10.5%) said Yes Limited little, 30 (37.7%) responded as No limited at all. Majority were found selecting option yes limited at lot about their Role Limitation/ Physical Health.

After Male Tai Chi Chuan Participants

It was found After Tai Chi Chuan that 22 (7.7%) replied in Yes Limited a lot, 30 (14%) said Yes Limited little, 108 (10.4%) responded as No limited all. A significant increase has been seen in general Role Limitation/ Physical Health around than 37.7% people in excellent or good health which was around 10.4% before

Before Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 77 (26.9%) responded as Yes Limited lot, 32 (11.3%) said Yes Limited a little, 17 (5.9%) replied in No limited at all. Majority were found selecting option yes limited at lot about their Role Limitation/ Physical Health.

After Female Tai Chi Chuan Participants

It was found After Tai Chi Chuan that that 16 (5.6%) opined in Yes Limited a lot, 31 (10.8%) said Yes Limited little, 79 (27.7%) responded in No limited at all. A significant increase has been seen in general Role Limitation/ Physical Health around more than 27.7% people in excellent or good health which was around 5.9% before.

Table 2 Physical Functioning

| N=286 | YES, limited | YES, limited | YES, Not limited |
|------------|--------------|--------------|------------------|
| Before | 167 | 72 | 47 |
| Percentage | 58.4% | 25.2% | 16.4% |
| After | 38 | 61 | 187 |
| Percentage | 13.2% | 21.3% | 65.5% |

The table showed the significant decrease has been seen in Role limitation due to Physical Health around more than 65.5% people have no limitations in activities which was around 16.4% before.

Table 3 Role limitations / Physical health (Male & female)

| N=286 | Excellent | V. good | Good | Fair | Poor |
|------------------------------|-----------|---------|-------|-------|------|
| Before (Male Participants) | 14 | 15 | 36 | 52 | 43 |
| Percentage | 4.9% | 5.2% | 12.6% | 18.2% | 15% |
| After (Male Participants) | 40 | 58 | 46 | 10 | 06 |
| Percentage | 14% | 20.2% | 16.1% | 3.5% | 2.1% |
| Before (Female Participants) | 08 | 10 | 33 | 44 | 31 |

| | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|
| Percentage | 2.8% | 3.5% | 11.6% | 15.4% | 10.8% |
| After (Female Participants) | 38 | 55 | 25 | 05 | 03 |
| Percentage | 13.2% | 19.3% | 8.7% | 1.8% | 1.1% |

The above table represented the response level of 286 (Male 160 (55.9%) and Female 126 (44.1%) participants who filled questionnaire before and after Tai Chuan, the analysis of the data in the above table is shown in terms of percentages and frequency counts with reference to the question asked by them related to QOL.

Before Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 14 (4.9%) replied as excellent, 15 (5.2%) said very good, 36 (12.6%), good, 52 (18.2%) opted for fair and 43 (15%) said poor. The majority were found selecting option Fair about their Physical Functioning.

After Male Tai Chi Chuan Participants

It was found After Tai Chi Chuan that 40 (14%) opted for the excellent, 58 (20.2%) said very good, 46 (16.1%), good, 10(3.5%) responded as fair and 06 (2.1%) said poor. A significant increase has been seen in general physical functioning around more than 14% people in excellent or good health which was around 4.9% before

Before Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 08 (2.8%) responded as excellent, 10 (3.5%) said very good, 33 (11.6%), good, 44 (15.4%) opted as fair and 31 (10.8%) said poor. majority were found selecting option Fair about their Physical Functioning.

After Female Tai Chi Chuan Participants

It was found After Tai Chi Chuan that 38 (13.2%) responded in excellent, 55 (19.3%) said very good, 25 (8.7%), good, 05 (1.8%) opted as fair and 03 (1.1%) said poor. A significant increase has been seen in general physical functioning around more than 13.2% people in excellent or good health which was around 2.8 % before.

Table 4 Role limitations / Physical Health

| N= 286 | Excellent | V. good | Good | Fair | Poor |
|------------|-----------|---------|-------|-------|-------|
| Before | 22 | 25 | 69 | 96 | 74 |
| Percentage | 7% | 8.7% | 24% | 33.5% | 25.9% |
| After | 78 | 113 | 71 | 15 | 9 |
| Percentage | 27.2% | 39% | 24.8% | 5% | 3% |

The tables revealed the significant increase has been seen in general physical functioning around more than 27.2% people in excellent or good health which was around 7% before as participated in present research.

Table 5 Bodily Pain (Male & Female)

| N= 286 | None | V. Mild | Mild | Moderate | Severe | V. Severe |
|----------------------------|------|---------|------|----------|--------|-----------|
| Before (Male Participants) | 12 | 17 | 36 | 38 | 29 | 28 |

| | | | | | | |
|------------------------------|-------|-------|-------|--------|-------|------|
| Percentage | 4.2% | 5.9% | 12.6% | 13.3% | 10.1% | 9.8% |
| After (Male Participants) | 60 | 43 | 24 | 15 | 11 | 07 |
| Percentage | 21% | 15% | 8.4% | 5.2% | 3.8% | 2.4% |
| Before (Female Participants) | 10 | 13 | 34 | 35 | 21 | 13 |
| Percentage | 3.5% | 4.5% | 11.9% | 12.2 % | 7.3% | 4.5% |
| After (Female Participants) | 52 | 38 | 15 | 09 | 08 | 04 |
| Percentage | 18.1% | 13.3% | 5.2% | 3.1% | 2.8% | 1.4% |

The above table the represented response level of 286 (Male 160 (55.9%) and Female 126 (44.1%) participants who filled the questionnaire before and after Tai Chuan, analysis of the data in above table is shown in terms of percentages and frequency counts with reference to the question asked by them related to QOL.

Before Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 12 (4.2%) replied in none, 17 (5.9%) said very mild, 36 (12.6%), mild, 38 (13.3%) opted for moderate, 29 (10.1%) said severe and 28 (9.8%) said Very Severe. Majority were found selecting option Mild about their Bodily Pain.

After Male Tai Chi Chuan Participants

It was found After Tai Chi Chuan that 60 (21%) responded as none, 43 (15%) said very mild, 24 (8.4%), mild, 15 (5.2%) said moderate, 11 (3.8%) replied as severe and 07 (2.4%) said very severe. Significant increase has been seen in bodily pain around more than 21% people in excellent or good health which was around 4.2% before

Before Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that that 10 (3.5%) opted as none, 13 (4.5%) said very mild, 34 (11.9%), mild, 35 (12.2%) replied as moderate, 21 (7.3%) said severe and 13 (4.5%) said Very Severe. Therefore, Majority were found selecting option Moderate about their Bodily Pain.

After Female Tai Chi Chuan Participants

It was found After Tai Chi Chuan that 52 (18.1%) said none, 38 (13.3%) said very mild, 15 (5.2%), mild, 9 (3.1%) said moderate, 8 (2.8%) said severe and 4 (1.4%) said Very Severe. A significant increase has been seen in Bodily Pain around more than 18.1% in excellent or good health which was around 3.5 % before.

Table 6 Bodily Pain

| N= 286 | None | V. Mild | Mild | Moderate | Severe | V. severe |
|----------------------|-------|---------|-------|----------|--------|-----------|
| Before Male & Female | 22 | 30 | 70 | 73 | 50 | 41 |
| Percentage | 7.7% | 10.5% | 24.5% | 25.5% | 17.5% | 14.3% |
| After Male & Female | 112 | 81 | 39 | 24 | 19 | 11 |
| Percentage | 39.1% | 28.3% | 13.6% | 8.4% | 6.6% | 3.8% |

A significant decrease has been seen in the bodily pain around 39.1% people have no pain problems which was around 7.7% before

Table 7 General Health (Male & Female)

| N=286 | D-True | M-True | D-Know | M-False | D-False |
|------------------------------|--------|--------|--------|---------|---------|
| Before (Male Participants) | 41 | 44 | 20 | 15 | 40 |
| Percentage | 14.3% | 15.4% | 7% | 5.2% | 14% |
| After (Male Participants) | 48 | 38 | 07 | 20 | 49 |
| Percentage | 16.8% | 13.3% | 2.4% | 7% | 17.1% |
| Before (Female Participants) | 34 | 32 | 10 | 11 | 39 |
| Percentage | 11.8% | 11.1% | 3.5% | 3.8% | 13.6% |
| After (Female Participants) | 38 | 36 | 04 | 09 | 37 |
| Percentage | 13.3% | 12.6% | 1.4% | 3.14% | 12.9% |

The above table represented the response level of 286 (Male 160 (55.9%) and Female 126 (44.1%) participants who filled questionnaire before and after Tai Chuan, analysis of data in above table is shown in terms of percentages and frequency counts with reference to the question asked by them related to QOL

Before Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 41 (14.3%) selected as Definitely True, 44 (15.4%) said Mostly True, 20 (7%), opted as Don't Know, 15 (5.2%) Mostly False and 40 (14%) said Definitely False. Majority were found selecting option Definitely True about their General Health.

After Male Tai Chi Chuan Participants

It was found After Tai Chi that 48 (16.8%) selected option of Definitely True, 38 (13.3%) said Mostly True, 7 (12.6%), favored Don't Know, 20 (7%) said Mostly False and 49 (17.1%) said Definitely False. Significant increase has seen in General Health around more than 16.8% people in excellent or good health which was around 14.3% before.

Before Female Tai Chi Chuan Participants

It was found that before Tai Chi Chuan that 40 (14%) opted Definitely True, 26 (9.1%) said Mostly True, 10 (3.5%), replied as Don't Know, 11 (3.8%) said Mostly False and 39 (13.6%) said Definitely False. The majority were found selecting option Definitely True about their General Health.

After Female Tai Chi Chuan Participants

It was found After Tai Chi Chuan that 38 (13.3%) responded as Definitely True, 36 (12.6%) said Mostly True, 04 (1.4%), replied as Don't Know, 09 (3.1%) said Mostly False and 37 (12.9%) said Definitely False. A significant increase has been seen in General Health around more than 13.3% people in excellent or good health which was around 11.8 % before.

Table 8 General Health's

| N= 286 | D-True | M-True | D-Know | M-False | D-False |
|------------|--------|--------|--------|---------|---------|
| Before | 81 | 70 | 30 | 26 | 79 |
| Percentage | 28.3% | 24.5% | 10.5% | 9.1% | 27.6% |
| After | 86 | 74 | 11 | 29 | 86 |

| | | | | | |
|------------|-------|-------|------|-------|-------|
| Percentage | 30.1% | 25.9% | 3.8% | 10.1% | 30.1% |
|------------|-------|-------|------|-------|-------|

A significant increase has been seen in general health around more than 30% have Good general health which was around 28.3% before

Table 9 Energy and Emotions (Male & Female)

| N=286 | A-Time | M-Time | S-Time | L-Time | N-Time |
|------------------------------|--------|--------|--------|--------|--------|
| Before (Male Participants) | 51 | 42 | 38 | 21 | 08 |
| Percentage | 17.8% | 14.7% | 13.2% | 7.3% | 2.8% |
| After (Male Participants) | 12 | 19 | 28 | 45 | 56 |
| Percentage | 4.2% | 6.6% | 9.8% | 15.7% | 19.6% |
| Before (Female Participants) | 42 | 39 | 26 | 14 | 05 |
| Percentage | 14.7% | 13.6% | 9.1% | 4.9% | 1.75% |
| After (Female Participants) | 07 | 08 | 17 | 40 | 54 |
| Percentage | 2.4% | 2.8% | 5.9% | 14% | 18.9% |

The above table represented the response level of 286 (Male 160 (55.9%) and Female 126 (44.1%) participants who filled the questionnaire before and after Tai Chuan, the analysis of the data in the above table is shown in terms of percentages and frequency counts with reference to the question asked by them related to QOL

Before Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 51 (17.8%) opted for All of time, 42 (14.7%) said Most of time, 38 (13.2%), said some of time, 21 (7.3%) responded as little of time and 08 (2.8%) said none of time. Majority were found selecting option All of Time about their Energy & Emotions.

After Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 12 (4.2%) opined as All of time, 19 (6.6%) said Most of time, 28 (9.8%), said some of time, 45 (15.7%) opted as little of time and 56 (19.6%) said none of time. A significant increase has been seen in Energy & Emotions around more than 19.6% people in excellent or good health which was around 2.8% before.

Before Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 42 (14.7%) responded as All of time, 39 (13.6%) said Most of time, 26 (9.1%), replied as some of time, 14 (4.9%) said little of time and 05 (1.75%) said none of time. Majority were found selecting option All of the time about their Energy & Emotions.

After Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 07 (2.4%) opined for All of time, 08 (2.8%) said Most of time, 17 (5.9%), said some of time, 40 (14%) responded as little of time and 54 (18.9%) said none of time. A significant increase has been seen in Energy & Emotions around more than 18.9% people in excellent or good health which was around 1.75 % before.

Table 10 Energy and Emotions

| N= 286 | A-Time | M-Time | S-Time | L-Time | N-Time |
|------------|--------|--------|--------|--------|--------|
| Before | 93 | 81 | 64 | 35 | 13 |
| Percentage | 32.5% | 28.3% | 22.4% | 12.2% | 4.5% |
| After | 19 | 27 | 45 | 85 | 110 |
| Percentage | 6.6% | 9.4% | 15.7% | 29.7% | 38.5% |

A significant increase has been seen from energy and emotions around 38.5% have allot of energy and emotional health which was around 4.5% before

Table 11 Vitality (Male & Female)

| N=286 | A-Time | M-Time | S-Time | L-Time | N-Time |
|------------------------------|--------|--------|--------|--------|--------|
| Before (Male Participants) | 46 | 50 | 31 | 25 | 08 |
| Percentage | 16.1% | 17.5% | 10.8% | 8.7% | 2.8% |
| After (Male Participants) | 13 | 16 | 20 | 29 | 82 |
| Percentage | 4.5% | 5.6% | 6.9% | 10.1% | 28.6% |
| Before (Female Participants) | 43 | 42 | 22 | 14 | 05 |
| Percentage | 15.3% | 14.61% | 7.7% | 4.9% | 1.7% |
| After (Female Participants) | 07 | 11 | 14 | 24 | 70 |
| Percentage | 2.4% | 3.8% | 4.9% | 8.4% | 24.4% |

The above table represented the response level of 286 (Male 160 (55.9%) and Female 126 (44.1%) participants who filled the questionnaire before and after Tai Chuan, analysis of the data in the above table is shown in terms of percentages and frequency counts with reference to the question asked by them related to QOL

Before Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 46 (16.1%) responded as All of time, 50 (17.5%) said Most of time, 31 (10.8%), opined as some of time, 25 (8.7%) said little of time and 08 (2.8%). majority were found selecting option All of Time about their Vitality.

After Male Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 13 (4.5%) answered as All of time, 16 (5.6%) said Most of time, 20 (6.9%), replied as some of time, 29 (10.1%) said little of the time and 82 (28.6%) said none of time. A significant increase has been seen in Vitality around more than 28.6% people in excellent or good health which was around 2.8% before.

Before Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 43 (15.3%) opted as All of time, 42 (14.6%) said Most of time, 22 (7.7%), answered for some of time, 14 (4.9%) said little of time and 05 (1.8%) said none of time. Majority were found selecting option All of the time about their Vitality.

After Female Tai Chi Chuan Participants

It was found before Tai Chi Chuan that 07 (2.4%) answered in favor of All of time, 11 (3.8%) said Most of time, 14 (4.9%), favored for some of time, 24 (8.4%) said little of time and 70

(24.4%) said none of time. A significant increase has been seen in Vitality around more than 24.4% people in excellent or good health which was around 1.8 % before.

Table 12 Vitality

| N= 286 | A-Time | M-Time | S-Time | L-Time | N-Time |
|------------|--------|--------|--------|--------|--------|
| Before | 89 | 92 | 53 | 39 | 13 |
| Percentage | 31.1% | 32.2% | 18.5% | 13.6% | 4.6% |
| After | 20 | 27 | 34 | 53 | 152 |
| Percentage | 7.1% | 9.4% | 11.9% | 18.5% | 53.1% |

A significant decrease has been seen in general emotional health problems around 53.1% people have no emotional health problem which was around 4.6% before.

Table 13 Mean & SD Before & After

| N= 286 | M/Before | M/After | ±SD/B | ±SD/A | P-Value |
|----------------------|----------|---------|--------|--------|---------|
| Physical Functioning | 5.16 | 5.94 | ±1.547 | ±1.586 | 0.01 |
| Role Limitations/PH | 4.38 | 4.98 | ±1.518 | ±1.548 | 0.00 |
| Bodily Pain | 5.69 | 5.95 | ±1.559 | ±1.592 | 0.01 |
| General Health | 2.73 | 2.98 | ±1.398 | ±1.416 | 0.05 |
| Energy & Emotions | 3.20 | 3.89 | ±1.412 | ±1.488 | 0.05 |
| Energy and Fatigue | 5.32 | 5.82 | ±1.557 | ±1.572 | 0.04 |
| Social Functioning | 5.45 | 5.89 | ±1.534 | ±1.546 | 0.01 |
| Role Limitations/EH | 5.10 | 5.53 | ±1.539 | ±1.557 | 0.03 |

DISCUSSION

The purpose of the study was to determine effects of performing Tai Chi Chuan exercise in regular life routine taking out one hour twice a week. Current research has collected data from various age groups attempting to study the effects of exercise with a particular focus on those who have difficulty participating in activities of daily living with difficulty without diagnosable cause, particularly in Pakistan. Current study comprises total of 286 participant responses. Data was collected both before and after exposure to experimental procedures. The positive correlation of the responses indicates the effects on the general health of the people involved as participants.

Previous Study Done in 2020

Bibliometric assessment of worldwide Tai Chi studies from 1980 to 2020 through Yanwei You, Leizi Min, Meihua, Tang, Yuquan Chen, Xindong Ma. An overall of 1078 datasets have been retrieved from the WoSCC database, contributing to the area of Tai Chi (Q1) and that have been tested in element thru an evaluation of thematic community systems of every subject matter found. Tai Chi has acquired growing interest as a motion recipe and fitness merchandising approach.

Previous Study Done in 2011

Illustration of the consequences of Tai Chi schooling on bodily characteristic withinside the elderly (ninety-four years) withinside USA Li Fuzhong, Ph.D., Harmer Peter, Ph.D., McAuley Edward, Ph.D., Terry E. Duncan, Ph.D., Susan C. Duncan, Ph.D., Chaumeton Nigel, Ph. DD, K. John Fisher, Ph.D. Effects of take a look at advocate that even though intervention may display ordinary effect (or no ordinary effect), it is able to exclusive stages of effectiveness for subgroups of individuals who vary of their prevention characteristics.

Previous Study Done in 2011

Effect of tai chi at the power of the muscle mass of the decrease extremities withinside the elderly. Ming Zhou 1, Nan Peng 2, Qiang Dai 3, HongWei Li 4, RongGuang Shi 5, Wei Huang 6. The effects offer statistics on alignment and the extension of the lengthy term -TC to save you lack of muscle power with age. CT may be awesome manner to scale down the fashion of age-associated decline in muscle with inside community. Previous research finished in China in 2002, 2011 and 2020 display that Tai Chi has one of a kind outcomes relying at the workout variant. Tai Chi Chuan is a completely unique shape of workout, aggregate of thoughts and frame thru a chain of low effect movements. This have a look at gives thrilling records for attention of widespread public benefited from normal exercise of Tai Chi Chuan, as it can be useful mediating physical, mental and emotional stresses that accompany the lifestyles revel in of widespread public.

Jen-Chen Tsai, Wei-Hsin Wang, et al posted their have a look at The Journal of Alternative and Complementary Medicine. Oct 2003. This explored outcomes of Tai Chi on lowering blood stress that is then chargeable for standard nicely being. After 12-weeks of Tai Chi education, the remedy organization confirmed tremendous lower in systolic blood stress of 15.6 mm Hg and diastolic blood stress eight mm Hg. Serum general ldx`l cholesterol degree reduced 15.2 mg/dL and high-density lipoprotein ldl cholesterol extended 4.7 mg/dL. By the use of STAI evaluation, each trait tension and nation tension had been reduced. This have a look at suggests that beneathneath nicely-designed conditions, Tai chi exercise classes reduce the consequences of favorable changes in the blood stress and lipid profile and improve subject tension. Therefore, tai chi is used as a casual modality in the treatment of patients with moderate hypertension with the promising financial benefits. Therefore, the big picture was improved in all areas of the physical, mental and emotional parameters.

CONCLUSION

Tai Chi helps improve the physical and mental health of the community. Mental health aspects in particular were particularly sensitive to changes in this group. Role of vitality (defined as energetic and not tired) Mental / emotional function (according to SF36v2, limit normal home or work activities due to emotional problems and improve overall emotional health Defined as an improvement). Each consultation consisted of 10 mins of respiration and stretching, accompanied with aid of using forty mins of Tai Chi Chuan 24 (Yang style) exercise then 10 mins of cool down. Physical Health Dimensions (PHD) such as Physical

Function (PF), Physical Role (PR), Physical Pain (PP), Overall Health (GH), Energy, Emotion (EE), Social Function (SF), Mental / Emotional Function (EF). The perception of vitality (VT) and intellectual fitness (MH) was evaluated. After the Tai Chi training intervention, physical measurements of PP, GH and intellectual measurements of RE, VT, and MH came out to be improved. Comparing the overall values of PHD or MHD, the latter is significantly longer. In summary, Tai Chi sports have had significant enhancing effect on self-assessed physical and mental health of the general public.

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