

CONTENTS

S. No	Titles	Page. No
1	Internet Addiction A Growing Phenomenon among College Students: A Study <i>Mr. Ajeesh George & Dr.Shoby Bovas</i>	01
2	Influence of Technology Dependence on Cognitive Flexibility and Experiential Avoidance among College Students <i>S.J. Ajith, Thamilselvan Palanichamy & Manoj Kumar Sharma</i>	10
3	Status of Mental Health among Children <i>R. Anitha & Dr.P.Rangasami</i>	18
4	A Study on Addiction to Technology among Higher Secondary Commerce Stream School Children with Special Reference to Subramanyam Higher Secondary School Vadavalli, Coimbatore <i>Ann Treesa Varghese & Mrs. Sangeetha Antony</i>	23
5	Social Media Addiction among College-Going Students: A Study on the Patterns, Impacts and Risks <i>Mr.K.L. Anthony & Dr. Shoby Bovas</i>	27
6	Gender Specific Online Shopping Inclination – A Study among Research Scholars <i>C. Arul Actovin , V.A. Ursula & C.Satheesh Kumar</i>	33
7	Usage of Mobile Phones among School Students <i>A. Asha & Dr.J.O.Jeryda Gnanajane Eljo</i>	37
8	Impact of Internet Addiction among Adolescent Boys and Need for Social Work Intervention <i>Ms.V. Bhavana & Dr. Kumudini Achchi</i>	42
9	The Impact of Internet Addiction on the Psychological Wellbeing and Quality of Sleep <i>Dr. I. Joe Sanjay & Ms.G. Anandhi</i>	47
10	Impact of Technology on Youth a Case Study on Madanapalle Town, Chittoor District, A.P <i>Dr.Kantam Rajesh Kumar</i>	53
11	Self Esteem of Adolescent Victims of Cyber Bullying <i>Dr.I.Ngaitlang Mary Tariang, R.Divya, Arunimabhattacharya , Steffy James & Arvind Raj</i>	57
12	Gender Difference in Internet Addiction among University Students <i>Dr.S.Kausalya</i>	64
13	Technology Addiction and Social Work Intervention among Adolescents <i>Dr.S.Vidhya</i>	69
14	Adolescents and Cyberspace: Glimpses of Healthy and Unhealthy Relationships <i>K.B. Hilalulla, G.Dhanalakshmi & P.B Shankar Narayan</i>	74
15	Influence of Technology Addiction Crop Up Mental and Health Disorders, Social Obstacles and Its' Scenario Analysis among Digital Natives <i>G. Kavitha & D. Sowmyadevi</i>	78
16	Technology in Marital Relationship: A Boon or a Bane? <i>Michelle Elizabeth Mathew & Dr.B.Nalina</i>	85
17	Technology Addiction and Health Impacts <i>S.Kirthika & Dr.S.Krishna Raj</i>	90
18	Parenting and Mentoring in the Era of Digitization – Necessity and Interventions <i>Ms. Mini M.V (Sr. Tessin Mynatty) & Dr. Shoby Bovas</i>	97

19	A Study on Internet Addiction among School Going Adolescents <i>Mr. R. Mathiyalagan Martin & Dr. K. Maheswari</i>	103
20	Influence of Facebook and Whatsapp Usage on Adolescent Girls <i>P. Vigneshwari Dharani & Mrs. Sandra Anandarajan</i>	108
21	Building Child Hood Lives through Self-Awareness <i>R. Muthulakshmi & Dr. Sheeja Remani B. Karalam</i>	115
22	Time for Digital Detox: Misuse of Mobile Technology and Phubbing <i>R. Nirmala & P. Tamilselvan</i>	121
23	Technology Addiction among Youngsters–A Review Study <i>Dr. (Mrs.) Padmasani & G.S. Dhanashree</i>	130
24	A Study on Mental Health Status of Users and Non-Users of Social Media among College Girls in Varshini Hostel at Trichy <i>Ms.P.L.Rani, Dr. G.Mettilda Buvanewari & Ms.J.S.Ritambara</i>	138
25	Relationship between Extent of Internet Addiction with Loneliness and Self-Esteem among College Students <i>Ms. Ranita Sarma, Dr. Ngaitlang Mary Tariang & Arvind Raj</i>	145
26	Relationship between Internet Addiction and Psychological Well-Being among Software Personnel <i>V. Selva Meenakshi & S.S. Srinithi</i>	151
27	Internet Addiction among Higher Secondary Students and the Role of School Counsellors <i>Semichan Joseph & Dr. D.Nirmala</i>	156
28	Influence of Social Networking Sites on College Students <i>K.Thirumalaisamy</i>	160
29	Internet Addiction among Professional College Students <i>Dr. M. Nirmala & T.K. Fathima Shajitha</i>	167
30	A Study on the Impact of Technology Addiction among the Youngsters <i>Dr.M.Nirmala & C.T.Megha</i>	174
31	The Impact of Smart Phone Addiction among Adolescent's Life <i>Dr.I.Maria Yesuraja, Ms.C.S. Nikhitha & Mr. A.Bellaro John Regan</i>	180

RELATIONSHIP BETWEEN INTERNET ADDICTION AND PSYCHOLOGICAL WELL-BEING AMONG SOFTWARE PERSONNEL

V.Selva Meenakshi & S.S.Srinithi

Assistant Professor, Department of Psychology, ManonmaniamSundaranar University, Tirunelveli



Abstract

Well-being is about making a life where we can contribute to a greater society. Where, we can have a more fulfilling existence with meaningful and supportive relationships. Well-being gives us a way to discover and explore our strengths. Well being helps us live life to our full potential. Internet addiction results in personal, family, academic, financial, occupational problems and lead to clinical problems of depression and anxiety. This study attempts to investigate the relationship between internet addiction and psychological well-being among software personnel. Sample size of 50 were chosen using convenient sampling method and assessed for their internet addiction using The Internet Addiction Test (Kimberlay S. Young, 2010) and Psychological well-being using The Psychological General Well-Being Index (Olivier Chassany et al, 2004) Results showed negative correlation between internet addiction and psychological well-being. Gender difference was also analyzed.

Introduction

Globally internet is recognized as medium for information exchange, in various fields such as in academic research, entertainment, communication and commerce. Nowadays controversial issues eschewed from internet use and its outcomes. Despite people are sickly addicted to it despite its importance and usefulness among modern men. Internet addiction is described as an impulse control disorder, which does not involve use of an intoxicating drug and is very similar to pathological gambling. Some internet users may develop an emotional attachment to on-line friends and activities they create on their computer screens. Internet users may enjoy aspects of the internet that allow that allow them to meet, socialize, and exchange ideas through the use of chat rooms, social networking websites, or “virtual communities”. Other internet users spend endless hours researching topics of internet online or “blogging”. Similar to other addictions, those sufferings from internet addiction use the virtual fantasy world to connect with real people through the internet, as a substitution for real-life human connection, which they are unable to achieve normally.

Warning Signs of Internet Addiction

- Preoccupation with the internet.
- Use of the Internet in increasing amounts of time in order to achieve satisfaction.
- Repeated, unsuccessful efforts to control, cut back or stop internet use.
- Feelings of restlessness, moodiness, depression, or irritability when attempting to cut down use of the Internet
- On-line longer than originally intended
- Jeopardized or risked loss of significant relationships, job, educational or career opportunities because of Internet use.
- Lies to family members, therapists, or others to conceal the extent of involvement with the internet.
- Use of the internet is a way to escape problems or to retrieve a dysphoric mood

Effects of Internet Addiction

Internet addiction results in personal, family, academic, financial, and occupational problems that are characterized of other addictions. Impairments of real relationships are disrupted as a result of excessive use of the Internet. Individuals suffering from internet addiction spend more time in solitary seclusion, spend less time with real people in their lives, and are often viewed as socially awkward. Arguments may result due to the volume of time spent on-line. Those suffering from Internet addiction may attempt to conceal the amount of time spent on-line, which results in distrust and the disturbance of quality in once stable relationships. Some sufferings from Internet addiction may create on-line personals or profiles where they are able to alter their identities and pretend to be someone other than himself or herself. Those at highest risk for creation of a secret life are those who suffer from low self-esteem feelings of inadequacy, and fear of approval. Such negative self concepts lead to clinical problems of depression and anxiety. Bing addicted to the internet can also cause physical discomfort or medical problem such as: Carpel Tunnel, Syndrome, dry eyes, back aches, severe headaches, eating irregularities (such as skipping meals), failure to attend personal hygiene, and sleep disturbance.

Psychological Well-being

Mental health experts advocate well being as a way of improvising our lives. Well being helps us to stay resilient, build social support and self-efficacy, and cope with adversity. In positive psychology, well being is a heightened state that's beyond just feeling happy or having good health. It's a condition of flourishing where we thrive in many aspects of our lives. Well being isn't as straightforward as just being happy. Well being looks a lots of different elements that make us complete humans tick. It considers how we

1. Cultivate meaning and good relationships
2. Use our strength
3. Contribute to a greater cause
4. Find pleasure in losing ourselves in things we find challenging and enjoyable.

Well being also explores the deep satisfaction we find in our social connections and in accomplishing things. Humans inherently want meaning and purpose in life. One way to achieve meaning and purpose is being a part of something greater than yourself. A strong sense of well being contributes to good mental health. It also helps to protect us from feelings of hopelessness and depression, acting as a 'guardian' of our mental health. Mental health is not merely the absence of mental illness rather it's a state of overall well being. The World Health Organisation defines mental health as a state of well being in which every individual realizes his or her own potential, can cope with normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community. Well-being is about making a life where we can contribute to a greater society. Where we can have a more fulfilling existence with meaningful and supportive relationships Well-being gives us a way to discover and explore our strengths. Well being helps us live life to our full potential.

Literature Review

Quing Xu et.al (2011) conducted a study on "Internet usage and Teens Psychological well-being in china" This study found increased internet use in higher grade students was associated with decreased psychological well being.

AfusatOlanikeBusari(2016) conducted a study on "Academic stress and internet addiction among adolescents: Solution focused social interest programme as treatment option." The findings indicated that there was a significant interaction effect of gender on participant's academic stress and internet addiction.

AasimehRehman, HumeraShafi, Touseef Rizvi (2016) conducted a study on “Internet Addiction and Psychological well-being among youth of Kashmir”. Results of a study revealed a significant negative correlation between internet addiction and psychological well being among youth of Kashmir.

Objectives

1. To find the level of psychological well being among the software personal
2. To find the level of internet addiction among the software personal
3. To find the relationship between Internet addiction and psychological well being
4. To find the gender differences in relationship between Internet addiction and psychological well being.

Sample

50 software personals were chosen using a method of convenience sampling. Among the sample 24 were females and 26 were males.

Tool

The Psychological General Well-Being Index (Olivier Chassany et al, 2004) was developed for the evaluation of perceived well-being and distress. It includes six dimensions: Anxiety, Depressed Mood, Positive Well-Being, Self Control, General Health, and Vitality. As the subscales are internally consistent, the 22 items have been frequently used to form an overall Index (Total Score) for general well-being, giving a maximal score of 110. Questionnaire completion and review will usually require up to 20 or 30 minutes. There are no incorrect answers and only one answer has to be given to each Question. The Internet Addiction Test (Kimberlay S. Young, 2010) is the first validated and reliable measures of addictive use of internet. The IAT is a 20 item questionnaire that measures mild moderate and severe level of Internet addiction. IAT has a six point rating scale. 20 - 49 points indicates mild or average level. 50 -79 points indicates moderate level of Internet addiction and 80 -100 points indicates severe level of addiction.

Procedure

In order to find the relationship between internet addiction and psychological well being among software personnel; a sample size of 50 were chosen using convenience sampling method. The sample were administered with The Psychological General well-being (Olivier Chassany et al, 2004), and Internet Addiction Test (Kimberlay S. Young, 2010) (The data thus obtained was subjected to statistical analysis.

Analysis

In order to ascertain the relationship between internet addiction and psychological well being, the datas from both the assessment were subjected to correlation.

Results and Discussion

Table No 1 Shows Level of Psychological well-being and Internet Addiction in the Sample

Variables	Score of the Sample	Interpretation
Psychological well being	63.52	High
Internet Addiction	55.46	Moderate

From table 1, The level of psychological well being in the sample (63.52) indicating that level of psychological well-being of the sample is high and level of internet addiction in the sample (55.46) indicating that the sample were moderate in their level of internet addiction.

Table No 2 Shows the Relationship between Internet Addiction and Psychological well-being in the Sample

Relationship between Internet addiction and Psychological well-being	Correlation Coefficient (r)
For the entire sample	-0.4
For Females	-0.5
For Males	-0.3

From table 2, The correlation coefficient pertaining to internet addiction and psychological well-being for the entire sample (-0.4), for females (-0.5), for males (-0.3) indicating negative correlation between internet addiction

and and psychological well-being. Hence when internet addiction is low, psychological well being is high. The negative correlation in males seem higher in males compared to females in the sample.

Conclusion

- Level of psychological well-being of the sample is high.
- Level of internet addiction is moderate in the sample.
- Internet addiction and psychological well-being are negatively correlated.
- Males show higher negative correlation between internet addiction and psychological well-being when compared with females.

Limitations

- Only software personnel were studied for their internet addiction and its relationship with psychological well-being was understood.
- Sample size was restricted to 50.
- Relationship between internet addiction and individual dimensions of psychological well-being (like anxiety , well-being etc) was not studied.
- Variations in internet addiction was not considered.

Suggestions for Future Research

- Study can be elaborated to include other professional vulnerable to internet addiction.
- Considering children as well as adolescent's proneness to internet addiction, its associated impact on their psychological well-being can included in future studies.
- Sample size can be increased to hundred or more including the same variables.
- Various dimensions of psychological well-being like resilience capacity and ability for self-control can considered into the scope of future studies.
- Variations in internet addiction and its varying impact on psychological well-being can be studied.

Recommendations

- Judicious use of internet must be cultivated.
- Individually, periodic checking in terms of self-control in internet usage is mandatory.
- Utility orientation of internet must be the prioritized.
- System of family must follow specific rule for internet usage.
- Children and adolescents must be educated properly on internet utility.
- Society must standardize ethics for internet usage.

References

1. Kimberly S. Young (1998): *Caught in the Net: How to Recognize the Signs of Internet Addiction and a Winning Strategy for Recovery*; United States, Wiley & sons publishers.
2. David N. Greenfield (1999): *Virtual Addiction*; United states , New Harbinger publishers.
3. <http://www.addictionrecov.org/Addictions/index.aspx?AID=43> retrieved on 30/12/17
4. Mihaly Csikszentmihalyi (1990): *Flow: The Psychology of Optimal Experience*; New York ,Haper Collins publishers
5. Seligman, Martin E.P. (2011): *Flourish: A visionary new understanding of happiness and well-being*; New York, Simon and Schuster.
6. Seligman, Martin E.P. (2002): *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment*; New York, Atria paperback.
7. <http://www.blackdoginstitute.org.au/clinical-resources/wellness/general-wellbeing> retrieved on 30/12/17
8. Kimberly S. Young (2010): *Internet Addiction: A handbook and guide to evaluation and treatment*; United States, Wiley & sons publishers.
9. Olivier Chassany et al (2004): *The psychological general well-being index*; France, MAPI Research institute.
10. AfusatOlanikeBusari (2016): *Academic stress and internet addiction among adolescent*
11. https://www.researchgate.net/publication/309099508_Academic_Stress_and_Internet_Addiction_among_Adolescents_Solution_Focused_Social_Interest_Programme_as_Treatment_Option retrieved on 15/12/17.
12. Aasimeh Rehman, Humera Shafi, Touseef Rizvi(2016) *Internet Addcition and Psychological well-being among youth of Kashmir*<http://www.ijip.in/index.php/?view=article&id=396> retrieved on 15/12/17
13. Quing Xu et.al (2011): *Internet usage and Teens Psychological well-being in china*http://www.cma.zju.edu.cn/neuromanagementlab/upload/day_130425/20130425152024.pdf retrieved on 12/12/17



Relationship Between Self Esteem and Emotional Intelligence among Preadolescent

KEYWORDS

Dr. Rajkumari

Assistant Professor Department of Psychology
Government Arts College Coimbatore-641018

S.S.Srinithi

No:9 Valampuri Amman koil St Tirunelveli Town
Tirunelveli-627006

ABSTRACT

Pre adolescent sample of 100 students aged between 8 and 10 years, were selected by purposive sampling. Sample were measured for their Emotional Intelligence and Self Esteem using The Schutte Self-report Emotional Intelligence Test (Schutte et al,1998) and The Rosenberg self-esteem Scale (Rosenberg, 1965) respectively. The data thus obtained was subjected to Pearson's product moment correlation. Analysis reveals that among the preadolescent, Self esteem and Emotional Intelligence are not related; this relationship varies with gender. Self esteem and self-recognition are directly related

Introduction

Self-esteem ranks the most important aspect of self development because the evaluation of one's own competencies affect emotional experiences, future behaviour, and long-term psychological adjustment. Self-esteem, the evaluative side of self; refers to the judgements one make about his/her worth and the feelings associated with those judgements.

High Self esteem implies a realistic evaluation of the self's characteristics and competencies, coupled with an attitude of self-acceptance and self-respect. The structure of self esteem depends on the evaluative information available to children and their ability to process the information. From middle childhood to adolescence, an individual difference in self esteem becomes increasingly stable and strengthens with age. Furthermore, across age, sex, socio-economic-status, individuals with mostly favourable self esteem profiles tend to be well-adjusted, sociable and conscientious (Laura E. Berk, 2011). Older preadolescent male children were predicted to have more self esteem than that of their female counterparts. (Deborah et.al, 1975)

Early start of Self-esteem is critical. But, Self-esteem can also change during the course of one's life depending on one's experiences. It motivates one to work hard and succeed. (Rita K. Baltus, 2012).

Emotional Intelligence refers to cluster of abilities or traits relating to the emotional side of life. It includes recognition of one's own emotion; regulation or management of one's own emotion; self-motivation, empathy and handling relationships. Such skills are important for personal success and having a happy and productive life. (Daniel Goleman, 2013)

Functionalists view that the broad function of emotion is to energize behaviour aimed at attaining personal goals. Emotions in addition to playing vital role in cognitive, social and physical development, contribute to the emergence of self-awareness and forge individuals with sense of self efficacy, confidence in one's own ability to control events in his/her surroundings. In order to adapt to their physical and social environment, children must gain control over their emotions, just as they do to their motor, cognitive and social behaviour. This emotional regulation of mastering the rules of culture as to when and how to convey an emotion is expected as early as late childhood (i.e) 8 to 10 years (Laura E. Berk, 2011). A Person is claimed to be emotionally mature when he/she is able to display emotions in appropriate degree and reasonable control (Saangeeta,1998)

Saleha Bibi, Sirda Saqlain and Bushra Mussawar (2016) explored the relationship between self-esteem and emotional intelligence among Pakistani university students. Study was conducted with a sample

size 250 (100 boys and 150 girls) aged between 20 and 30. Sample was drawn from Rawalpindi and Islamabad universities of Pakistan. Sample was collected by using convenient sampling technique. Rosenberg self-esteem scale was used to measure self-esteem among university students and emotional intelligence was measured by using emotional intelligence scale by Wong and Law. Pearson Product moment coefficient of correlation was used in order to find out relationship of emotional intelligence with self-esteem among Pakistani university students. Independent T-test was used to access gender difference in self-esteem and emotional intelligence. Results of study proved that there exist positive relationship between self-esteem and emotional intelligence among Pakistani university students and it was found that females were more emotionally intelligent as compared to males but there does not exist any statistically significant gender difference in self-esteem among university students.

Fen kong, Jingjing, Zhao Xuqun you (2012) examined both the mediation effects of social support and self-esteem for the relationship between trait emotional intelligence and life satisfaction in late adolescence. The participants were 489 Chinese college students with an age range of 17-23 years. Data were collected by using the Wong Law Emotional Intelligence Scale, the Multi-Dimensional Scale of Perceived Social Support, the Rosenberg Self-esteem Scale, and the Satisfaction with Life Scale. Path analysis showed that social support and self-esteem fully mediated the relationship between trait EI and life satisfaction in late adolescence. Moreover, a multi-group analysis indicated that the males with high social support are more likely to gain greater life satisfaction than the female counterparts.

Banafshe Hasanvand, Mohamad Khaledian (2012) examined the relationship of the emotional intelligence with the self-esteem and the academic achievement in the BA (bachelor of art) students. A sample size of 100 students were chosen using simple random sampling. The Ann-Bar questionnaire containing 90 questions on emotional intelligence and Cooper-Smith questionnaire containing 58 questions on self-esteem were used to collect the relevant data. Further, frequency, percentage, average, skew, Pearson-regression correlation coefficient and T test were applied. The results showed that there is a meaningful positive relationship between the existing intelligence, general self-esteem, social esteem, public esteem, educational self-esteem and the academic achievement. The regression coefficients for realism and self-esteem variables were significant, such as these variables were predictors of self-esteem. Among the variables, realism has the maximum role in predicting the self-esteem. Also, results showed there was no significant relationship in the emotional intelligence and self-esteem between male and female students.

Lourdes Rey, Natalio Extremera, and Mario Pena (2011) examined the relationship between perceived emotional intelligence, self-esteem and life satisfaction in a sample of 316 Spanish adolescents (179 females and 137 males), ranging in age from 14 to 18. Demographic information was collected, along with data through the use of three self-report measures: the Trait Meta-Mood Scale, the Rosenberg Self-Esteem Scale and the Satisfaction with Life Scale. As expected, perceived emotional dimensions, particularly mood clarity and repair, showed positive associations with life satisfaction. Self-esteem also correlated significantly and positively with levels of adolescents satisfaction with life. More interestingly, results of structural equation modeling indicated that mood clarity and emotional repair had a significant direct and indirect link (via self-esteem) with life satisfaction in adolescents. This study contributes to an understanding of the underlying process between perceived emotional intelligence and life satisfaction. Findings encourage moving beyond the examination of direct association between perceived emotional intelligence and life satisfaction and focusing on the role of potential mechanisms such as self-esteem involved in the link between perceived emotional intelligence and life satisfaction in adolescents.

Revelation of these researches led to the understanding that both Self Esteem and Emotional Intelligence are related; the present researcher is interested in understanding the relationship between Self- Esteem and Emotional Intelligence among the pre-adolescent sample as there are very least researches in this sample. Moreover these researches don't seem to have been attempted in rural sample of India.

Objectives

- To find the level of Self-esteem among the pre adolescents.
- To find the level of emotional intelligence (in terms of Self-recognition, Self-regulation, Self- motivation, Empathy and Handling relationships) among the pre-adolescents.
- To find the relationship between Emotional Intelligence (in terms of Self-recognition, Self-regulation, Self- motivation, Empathy and Handling relationships) and Self -Esteem among the pre-adolescent.
- To find out the gender differences in the relationship between Emotional Intelligence and Self Esteem among the pre-adolescents.

Variables

- 1) Self Esteem
- 2) Emotional Intelligence

Sample

100 Sample (50 boys and 50 girls) aged between 8 and 10 years (mean age =9.13, SD= 0.73) were chosen from an aided school and two public schools in Tirunelveli using purposive sampling method.

Inclusion criteria: Healthy, literate children aged between 8 and 10 year old
Exclusion criteria: Differently abled and illiterate children aged less than 8 years and more than 10 years,

Screening Tools

- 1) Coloured Progressive Matrices (Raven et al, 2012) with reliability coefficient of 0.88.
- 2) General Health Questionnaire (Goldberg, 1988) with Cronbach's reliability coefficient 0.87.

Tools

- 1) The Rosenberg self -esteem Scale (Rosenberg, 1965) with Cronbach's reliability coefficient of 0.77; containing 10 items in a four point scale.

- 2) The Schutte Emotional Intelligence Test (Schutte et al, 1998) with reliability coefficient of 0.90; containing 33 items in a five point scale, that measures Emotional Intelligence in five dimensions such as Self-recognition, Self-regulation, Self -motivation, Empathy and Handling relationships.

Procedure

From three schools (an aided school and two public school) in Tirunelveli, 8 to 10 years old children were screened using Coloured Progressive Matrices (Raven et al, 2012) and General Health Questionnaire (Goldberg, 1988). Children found healthy based on these screening tests were chosen to be the sample. 100 sample (50 boys and 50 girls) were selected using purposive sampling and were included in the study to ascertain the relationship between self esteem and Emotional intelligence among the preadolescent. For this purpose, Sample were measured for their Emotional Intelligence and Self Esteem using simple paper pencil tests that involves self report of the individual; The Schutte Self -report Emotional Intelligence Test (Schutte et al, 1998) and The Rosenberg self -esteem Scale (Rosenberg, 1965) respectively. The sample were instructed as follows while administering The Schutte Self -report Emotional Intelligence Test; "Sit relaxed in a row. Have your pencils sharp and ensure that you have paper that has 33 statements in it. Now in this test you are to tell about yourself pertaining to each statement. Read each statement carefully, think it over and give your response in the five point scale (i.e) response options that say strongly disagree, disagree, neither agree or disagree, agree, strongly agree. Circle the response that is appropriate to you. Please note neither of the response is right nor wrong, so feel free to give responses that perfectly relates to you. You may clarify your doubts with the test administrator". Time taken for administration was approximately 35 minutes. After a break of 5 minutes, the sample were subsequently given with The Rosenberg self -esteem Scale and were instructed as follows, "Sit relaxed in a row. Have your pencils sharp and ensure that you have paper that has 10 statements in it. Now in this test you are to tell about yourself pertaining to each statement. Read each statement carefully, think it over and give your response in the four point scale (i.e) response options that say strongly disagree, disagree, agree, strongly agree. Circle the response that is appropriate to you. Please note neither of the response is right nor wrong, so feel free to give responses that perfectly relates to you. You may clarify your doubts with the test administrator". Time taken for administration of this test was approximately 12 minutes. The responses thus obtained were scored using respective manuals. Strict ethical standards were adhered all along the study.

Statistical Analysis

The resultant data was tabulated and was subjected to Pearson's product moment correlation using MS Excel 2007 in order to ascertain the relationship among the variables (Self- Esteem and Emotional Intelligence) in the specified preadolescent sample (8 to 10 years)

Tables

Table 1: shows the Mean and Standard Deviation of scores with respect to Self Esteem and Emotional Intelligence along with its individual dimensions

Sl.no	Variables	N	Mean	Standard Deviation
1	Self-Esteem	100	21.42	3.64
2	Emotional Intelligence	100	9.81	8.11
3	Self-Recognition	100	19.96	2.69
4	Self-Regulation	100	19.56	2.62
6	Self-Motivation	100	19.68	3.95
7	Empathy	100	19.00	2.74
8	Handling Relationship	100	19.60	3.54

Table 2: shows the Pearson product moment correlation between Self Esteem and Emotional Intelligence with its respective dimensions

Sl.no	Variables	N	Value of Pearson (r)
1	Self Esteem and Emotional Intelligence	100	-0.09
2	Self-esteem and Self-recognition	100	0.51
3	Self-esteem and Self-regulation	100	0.04
4	Self-esteem and Self-motivation	100	-0.26
5	Self-esteem and Empathy	100	-0.13
6	Self-esteem and Handling relationships	100	-0.22
7	Self-esteem and Emotional Intelligence(among females)	50	-0.30
8	Self-esteem and Emotional Intelligence(among males)	50	-0.08

Results and Discussion

Both theory and early researches that investigated the link between Emotional Intelligence and emotional well-being revealed the relationship between Emotional Intelligence and Mood, and between Emotional Intelligence and Self-Esteem. The results of these studies indicated that higher Emotional Intelligence was associated with characteristically positive mood and higher Self-Esteem. Yet another study investigated the role of Emotional Intelligence in mood and Self-Esteem regulation and found that individuals with higher Emotional Intelligence showed less of a decrease in positive mood and Self-Esteem after a negative state induction and showed more of an increase in positive mood, but not in Self-Esteem, after a positive state induction. (Schutte et al, 2010)

Contradictory results were revealed in the present research that from the table 2, Product moment correlation between Self-Esteem and Emotional Intelligence, $r = -0.09$, indicates that there is no correlation between two variables Self Esteem and Emotional Intelligence. This shows that self esteem and Emotional Intelligence are not related among the pre-adolescent. But present research also reveals that from the table, value of correlation between Self- Esteem and Self –Regulation, $r = 0.51$, indicates that there is positive correlation between two variables Self Esteem and Self Recognition. This shows that Self Esteem and Self Recognition are related among the pre-adolescent.

From the table 2, the value of correlation between Self Esteem and Self – Regulation, $r = 0.04$, indicates that there is no correlation between the two variables. This shows Self Esteem and Self – Regulation are not related among the preadolescent.

From the table 2, the value of correlation between Self Esteem and Self – Motivation, $r = -0.26$, indicates that there is negative correlation between the two variables. This shows that Self Esteem and Self – Motivation tend to be negatively related among the pre adolescent.

From the table 2, the value of correlation between Self Esteem and Empathy, $r = -0.13$, indicates that there is negative correlation between the two variables. This shows that Self esteem and Empathy tend to be negatively related among the pre adolescent.

From the table 2, the value of correlation between Self Esteem and Handling Relationship, $r = -0.22$ indicates that there is negative correlation between the two variables. This shows that Self Esteem and Handling Relationships tend to be negatively related among the pre adolescent. From the table 2, The value of correlation between Self Esteem and Emotional Intelligence among the pre- adolescent females, $r = -0.30$, indicates negative correlation between two variables. This shows that Self –Esteem and Emotional intelligence tend to be negatively related among the pre-adolescent females. The value of correlation between two variables Self Esteem and

Emotional Intelligence among males, $r = -0.08$, indicates that there is no correlation between the two variables males. This shows that, Self Esteem and Emotional Intelligence are not related among pre-adolescent males.

Conclusion

- Self esteem and Emotional Intelligence are not related among the pre-adolescent.
- Self esteem and Self –Recognition (a dimension of emotional intelligence) are related among the pre adolescent.
- Self –Esteem and Emotional Intelligence tend to be negatively related among the pre-adolescent females and are not related among the pre-adolescent males.

References

- 1) A.K Singh (2006): Tests, Measurements and Research Methods in Behavioural Sciences; Patna, Bharati Bhawan Publishers.
- 2) Daniel Goleman (2013): Emotional Intelligence; New Delhi, Bloomsbury Publishing India.
- 3) Goldberg D, Williams P (1988): A user's guide to the General Health questionnaire. Windsor, UK: NFER-Nelson.
- 4) Laura E. Berk (2011): Child Development (8th edition); New Delhi, PHI Learning Private Limited.
- 5) Rosenberg (1965): Society and Adolescent Self image. Princeton, NJ: Princeton University Press.
- 6) Ravens J, C (2014): Coloured Progressive Matrices; Delhi, Pearson India (P) Ltd.
- 7) Schutte, N.S., Malouff, J.M., Hall, L. E., Haggerty, D.J., Cooper, J. T., Golden C.J (1998) Development and validation of a measure of emotional intelligence, Personality and Individual Difference
- 8) http://shodhganga.inflibnet.ac.in/bitstream/10603/7872/9/09_chapter%202.pdf
- 9) <https://www.omicsonline.org/open-access/relationship-between-emotional-intelligence-and-self-esteem-among-pakistani-university-students-2161-0487-1000279.php?aid=78649>
- 10) https://www.researchgate.net/publication/234059750_Emotional_intelligence_and_life_satisfaction_in_Chinese_university_students_The_mediating_role_of_self-esteem_and_social_support
- 11) <http://article.sapub.org/10.5923.j.ijpbs.20120206.06.html>
- 12) https://www.researchgate.net/publication/272675488_Perceived_Emotional_Intelligence_Self-Esteem_and_Life_Satisfaction_in_Adolescents
- 13) <http://www.tandfonline.com/doi/abs/10.1080/02699930143000482>



COMPARISON OF STUDENT FRIENDLY ENVIRONMENT AMONG EARLY ADOLESCENTS IN SELECT GOVERNMENT AND PRIVATE SCHOOLS IN TIRUNELVELI DISTRICT

Ms.S.S.Srinithi,

Assistant Professor, Department of Psychology, Manonmaniam Sundaranar University, Tirunelveli - 627012Tamil nadu, India.

Ms. MothiSeenivasan,

Under Graduate Student, III Year B.Sc Psychology, Department of Psychology, Manonmaniam Sundaranar University, Tirunelveli - 627012Tamil nadu, India.

ABSTRACT The study intended to compare student friendly environment among early adolescents in select government and private schools in Tirunelveli district. 60 sample (30 each from private and government schools) belonging to age range 13 and 14 were chosen using convenient sampling method. A scale with 60 items (6 dimensions with 10 items each) with response choices - have, would like it, and wouldn't like it was used. Survey method was used to collect the needed data. Results reveal that government schools are more student friendly compared to private schools.

KEYWORDS :

Introduction

Schools should take care of its students socially, psychologically and physically. Such schools can be said to be student friendly. The student friendly school environment should its nurture student into healthy adults by giving them individual attention and provide a climate that is emotionally secure, physically safe and psychologically enabling.

Mental health of students, especially early adolescents should be cared as they are neither too impressionable nor overt thinkers about the future. These students are in perpetual stress, especially because of academics and the need to be successful in it. These students should feel secure and have a sense of being taken care of in school in order to see them as healthy adults.

Schools should teach students to have a more altruistic approach towards their community. Extra-curricular activities like chess, music, karate, drama, debate and other subject oriented clubs help students learn new things and find unknown talents in them and refresh their minds. Schools which give equal importance to both academics and skill development help the students find a good footing in life by giving them other ways for paving their future even if they don't succeed academically.

A good Teacher-Student relationship helps the student in many ways especially by giving them a good boost of confidence. Peer relationship help children in finding a sense of belonging which helps alleviate insecurities and inferiority complex. Lessons which are difficult, lots of homework and punishment if the students fail to do their work properly, boring classes all make them lose interest in school in turn making them unhappy which may lead to depression and other such problems. Comfortable seating arrangements, spacious and ambient classrooms may help the students feel comfortable in sitting quietly in class and pay better attention. But it is not normal for children to sit quietly in class hour after hour, day after day, year after year till they finish their studies.

Sexual education especially for early adolescents on topics like pubertal changes, good touch-bad touch and personal hygiene are necessary to create an awareness in them. But, sadly there is no awareness. Such classes are needed for these students especially girls.

Reviews

Erin B. Godfrey, David Osher, Leslie Williams, Sharon Wolf, et al (2011) in their study on Cross-national measurement of school learning environments: Creating indicators for evaluating UNICEF's Child Friendly Schools Initiative examined the psychometric properties of a student-reported measure of school quality, the CFS Conditions for Learning Survey, to examine its utility as a cross-national comparative measure to evaluate UNICEF's Child Friendly Schools initiative. Factor analyses were conducted on data from fifth and sixth grade students in 68 students across the Philippines, Nicaragua, and South Africa. The results suggested that items in the

CFS Conditions for Learning Survey can be used to create both reliable cross-national and country specific indicators of school quality and provide a blueprint for future psychometric work in the field of comparative child and family policy.

Khush Funer Murtaza (2011) studied Developing child friendly environment in early childhood education classroom in Pakistan wherein the study employed a case study approach. The focus group participants and interviewees were selected from a variety of stakeholders, which included parents, students, teachers and head teachers from public sectors. The study revealed that institutional support and monitoring teachers' personal propensity to learning for improving pupils' learning, the prior ECED learning experiences and pedagogical content knowledge play an important role in engaging teachers in developing their thinking and teaching practice.

Method

Aim

To compare select government and private school in terms of their student friendly environment.

Objectives

To find the level of student friendliness in government

To find the level of student friendliness in private school

To compare the level of student friendliness in government and private school.

Sample: 60 sample (30 each from private and government schools) belonging to age range 13 and 14 were chosen using convenient sampling method.

Tool: A scale with 60 items (6 dimensions with 10 items each) with response choices - has, would like it, and wouldn't like it.

Research Design: Survey method.

Results and Discussion

Table 1 shows the average score on student friendly school

Average Score on Student Friendly Schools	
Government	Private
34	33

Figure 1 shows the average score on student friendly school

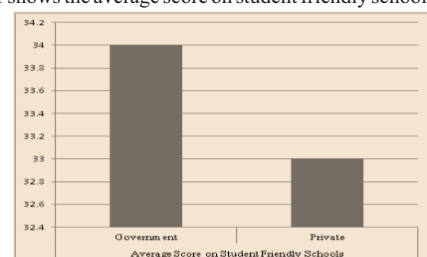


Table 2 shows percentage on students' attitude towards school

S.N	Items	Private	Government
1.	Satisfaction in school life	20%	10%
2.	Interest in school	37%	20%
3.	Happiness in school life	7%	3%
4.	Feeling of being taken care of in school	20%	27%
5.	Sense of how a school should be	40%	33%
6.	School is in the way you would like it to be	53%	50%
7.	School can be changed into something better	47%	43%
8.	School makes you a better person	40%	20%
9.	Confidence to express your thoughts and ideas in school	43%	47%
10.	School helps you get a sense of direction or meaning in life	20%	10%

Table 3 shows percentage of students' haves in terms of Extracurricular, Recreational Activities and Skill Development Classes

S.N	Items	Private	Government
1.	Programs to help people in community	10%	13%
2.	Student council	37%	20%
3.	Activities like swimming, karate, acting, etc.	13%	43%
4.	NSS, NCC, Scouts and Guides	10%	97%
5.	Drama club, debate club, science club, etc.	83%	23%
6.	Activities like chess, music, art, etc.	100%	97%
7.	Intra and inter-school competition	7%	3%
8.	Self-development skills like public speaking	0%	0%
9.	Equal importance given to both skill development and academics	37%	30%
10.	Personal skills are developed by school	23%	20%

Table 4 shows percentage on students' haves in terms of Teacher-Student and Peer relationship

S.N	Items	Private	Government
1.	Kind and friendly teachers	67%	83%
2.	Teachers who teach well	87%	93%
3.	Teachers who treat you as an individual and notice your activities	37%	33%
4.	Teacher they like	93%	90%
5.	Teacher they don't like	90%	93%
6.	Good relationship with teachers	57%	37%
7.	Teachers who punish	0%	10%
8.	Teachers who show partiality	87%	83%
9.	Many friends in your school	93%	87%
10.	Sense of belonging with your peer group	93%	80%

Table 5 shows percentage on students' have in terms of Syllabus, School policy and Way of Teaching

S.N	Items	Private	Government
1.	Lessons they like	13%	10%
2.	Lessons are difficult	97%	73%
3.	Sufficient teachers in school	17%	100%
4.	Sufficient free time	10%	57%
5.	Can pay attention for the full span of class	37%	40%
6.	Health care assistant in school	90%	0%
7.	Classes that are practical and interactive	57%	43%
8.	Classes that are boring	97%	83%
9.	Lots of homework	100%	87%
10.	Assignments	100%	97%

Table 6 shows percentage on students' haves in terms of Classroom

Settings and School Environment & Surrounding

S.N	Items	Private	Government
1.	Comfortable seating arrangements	67%	50%
2.	Audio-video classes and smart boards	10%	57%
3.	Good ambience in class	3%	27%
4.	Drinking water facilities in school	93%	50%
5.	Good toilet facilities in your school	77%	40%
6.	Lots of play space	10%	57%
7.	Permission to eat lunch outside class	0%	77%
8.	Spacious classrooms	60%	50%
9.	Rules to keep your school clean	93%	63%
10.	Lots of trees in school	40%	63%

Table 7 shows percentage on students' haves in terms of Sexual, Moral (Character), and Physical Education

S.N	Items	Private	Government
1.	Education classes about pubertal changes	0%	0%
2.	Education classes about Good Touch-Bad Touch	0%	0%
3.	Education classes about personal hygiene	0%	0%
4.	Moral education classes	0%	0%
5.	Benefited from moral education classes	0%	0%
6.	Activities to implement morals in your day-to-day school life	0%	0%
7.	Less than two physical education classes per week	97%	80%
8.	Regular checkup for height and weight	27%	63%
9.	Sports equipment	20%	10%
10.	Play different indoor and outdoor sports	13%	10%

From table 1 to 7 and Chart 1, the Government school was more student friendly compared to the Private school in terms of Student's attitude towards school; Extracurricular, Recreational, and Skill development classes; Teacher-Student and Peer relationship, School policy; Class room and School settings; Sexual, Moral and Physical Education.

Government schools scored better in terms of confidence to express thoughts and ideas in school; programs to help people in community; Activities like swimming, karate and acting, NSS, NCC, scouts and guides; kind friendly teachers; teachers who teach well; sufficient teachers in school; sufficient free time; paying attention to full span of class; classes that were less boring; less homework; less difficult lessons; audio-visual classes and smart boards; good ambience in class; lots of play space; lots of trees in school; regular height and weight check up; more physical education classes.

Private schools scored better in terms of availability of sports equipments; playing in-door and out-door games; comfortable seating arrangements; drinking water facility; good toilet facility; spacious class room; rules to keep class clean; health care assistance; practical interactive classes; more assignments; teacher who treat students as individuals and notice their activities; teachers they like; good relationship with teachers; teachers who show partiality; many friends in school; sense of belongingness with peers; activities like student council, science club, drama club, chess, music, art; intra and inter school competitions; equal importance to skills and academics; development of personal skills

Neither the government schools nor the private schools had avenues

for the skills pertaining to skill development; educational classes on pubertal changes, good touch and bad touch, personal hygiene, moral values and activities that implement moral education.

Conclusion

While, it has become a given that students should be in school for 8 hours a day, the comfort level of the students has not been given much importance. The Indian system of education is not student-oriented. Schools should be made more student friendly to help the students become healthy and happy individuals. Even though the study reveals that the government school is more student friendly, it lacks some factors that can be found in private schools. These when attended could make government schools even more enabling and more student friendly.

Limitations

1. The study is limited to only select government and private schools.
2. Only a limited number of data was selected from a large number of data collected due to data mining.
3. The tool is yet to be standardized.

References

1. Godfrey E et. al (2012, March 01). Cross-national measurement of school learning environments: Creating indicators for evaluating UNICEF's Child Friendly Schools Initiative. Retrieved September 18, 2017, from [https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC3341137/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3341137/)
2. Murtaza, K. F. (2011). Developing child friendly environment in early childhood education classroom in Pakistan. *International Journal of Academic Research in Business and Social Sciences*, 1(3), 408-418.



LONELINESS AND DEPRESSION AMONG UNIVERSITY STUDENTS

S.S.Srinithi

Assistant Professor of Psychology

**N. Radha
Jeyalakshmi**

Post graduate student of Psychology *Corresponding Author

ABSTRACT To explore the relationship between loneliness and depression among university students, a sample of one twenty under graduate and post graduate students from the Manonmaniam Sundaranar university belonging to age range 17 to 23 were chosen using the method of convenient sampling to participate in the study. Adapting to survey method a total of 100 data were collected using Beck depression inventory and UCLA loneliness scale. Correlational research design was used to full fill the objectives of this study. Correlation and t-test were applied. Results revealed that there is positive correlation between loneliness and depression; there is significant loneliness among sample who is single child compared to sample who are born with siblings and there is significant difference in the level of depression between males and females

KEYWORDS : Depression , Loneliness, university students**Introduction:**

Loneliness is a negative state of mind. Aloneness is positive, notwithstanding what the dictionaries say. In dictionaries, loneliness and aloneness are synonymous they are synonyms; in life they are not. Loneliness is a state of mind when you constantly miss the other; aloneness is the state of mind when you are constantly delighted in yourself. Loneliness is miserable; aloneness is blissful (Osho, 2010)

Loneliness is a complex and usually unpleasant emotional response to isolation. Loneliness typically includes anxious feelings about a lack of connection or communication with other beings, both in the present and extending into the future.

Loneliness touches every one. No one can escape it completely. Loneliness is no respecter of age or rank. Whether a young student, a stay-at-home mom, a busy executive, a retired pensioner, a grieving widower or widow, or even a pastor working with people every day, all know what it means to be lonely. Loneliness may be one of the most painful experiences that everyone goes through in their life. Perhaps everyone find themselves living in the midst of it at this very moment. Strikingly, many people who live alone never feel lonely, yet some who live with others in crowded cities know only too acutely how loneliness can infect our lives. When one think of loneliness often visualize the aged who live alone, but a young adult moving to a new city, an entrepreneur beginning a business, a partner in a struggling marriage, or a leader in a challenging corporate environment can be as lonely as a solitary elderly person in a one-room apartment. (Trevor Hudson, 2016)

Modern age has given a serious psychological problem-depression. The cases of depression have recently grown to an alarming number in developed and developing countries. Even in India, where the cultural and spiritual level is quite high; the number of depressed persons are increasing every day. Depression is a serious mental illness with a wide variety of mood variations of melancholy, sadness, disappointment and despair. It is a combination of emotional, cognitive and behavioral symptoms. Broadly speaking, a person faces an uncomprehending situation either courageously or succumbs to emotions that would precipitate into various types of depressive illnesses. All, at one stage or the other, come across mentally demanding environment, temporarily or continuously. But, if an abnormal pattern of behavior in a normal environment is shown repeatedly, it calls for immediate consultation and therapy. According to Secunda et al. (1973), "Depression may constitute the most prevalent form of psychopathology". Woodruff et al. (1974) summarized cross-cultural survey that suggests at least five percent of men and nine percent of women will suffer from clinically significant episodes of primary depression. Primary depression is depression in persons with no previous psychiatric history other than affective disorder. Depressive mood also occurs throughout the entire spectrum of psychopathology and especially associated with anxiety neurosis, hypochondria, a number of organic brain syndromes, marital adjustment and possibly alcohol. A survey by the National Institute of Mental Health (NIMH,

1973) found that 17.5 percent of 4,45,115 people receiving psychological treatment had been diagnosed as suffering from some type of depression. Depression is especially prevalent among college students. The earliest known description of depression was made by Hippocrates on psychological disorder is about 400 B.C. Hippocrates attributed the disorder to movement of black bile into the brain in a manner that 'dark ended' the spirits. About five hundred years later, in A.D.80, the physician Aretacus described the melancholic person as 'sad, dismayed and sleepless, they become this by their agitation and loss of refreshing sleep and at a more advanced stage they complain of a thousand futilities and desire death'. Aretacus is also remembered for having delineated different types of depressive syndromes including the manic depressive syndrome. As we know it is difficult to read human mind .and it is particularly so when we have to approach a patient with mood alterations. It is extremely complicated and challenging at the same time.

Review of Literature

Archana (2008) studied the effect of sociability and shyness on depression and loneliness among educated youth. Data was collected from one hundred and seventy seven college students in which males were ninety three and females were eighty four. The tools Beck Depression Inventory, Revised UCLA Loneliness Scale, Sociability Scale, Shyness Scale, Socio Economic Status Scale (2005) and personal profile was used. ANOVA/ANCOVA was carried out in order to find the effect of education, gender and their interactive effect on sociability, shyness, loneliness and depression. Similarly Inter Correlation Matrix was carried out for both college and school students separately. Results show that a significant positive relationship existed between depression and loneliness and between depression and shyness. This revealed that students who were depressed were found to lonely as well as shy, students who were sociable were found to be less depressed, less lonely and less shy and students belonging to high socio economic status family were found to be lonely.

Aim: To explore the relationship between loneliness and depression among university students

Objectives:

1. To find out whether there is a relationship between loneliness and depression among students.
2. To find out whether there is difference in the level of loneliness among students who are single child and who are born with siblings.
3. To find out whether there is gender differences in level of loneliness and depression among students.

Hypothesis:

1. There is relationship between loneliness and depression
2. There is difference in the level of loneliness among students who are single child and students who are born with siblings.
3. There is difference in the level of loneliness and depression between males and females.

Sampling: Using the method of convenient sampling, a sample of one twenty under graduate and post graduate students from the Manonmaniam Sundaranar university belonging to age range 17 to 23 were chosen to participate in the study.

Inclusion Criteria - Students who are studying in the university departments and Students aged between 17 and 23

Exclusion Criteria- Students who are studying in the university distance education and Students who are over and under the age range from 17 to 23

Data Collection: Adopting Survey method; a total of 120 data were collected of which 100 were valid and 20 were invalid due to incomplete response. Hence a total of 100 data were taken for the study. Personal details such as age, sex, educational qualification, family type, marital status, number of friends and number of sibling were collected to understand the socio-demographic status of the sample. Beck depression inventory and UCLA loneliness scale were used to collect the needed data.

Tools: Beck Depression Inventory (reliability coefficient is 0.93 and validity is 0.95) and UCLA Loneliness Scale (The reliability coefficient is 0.94).

Procedure: The investigator visited each department separately, contacted various department students of Manonmaniam Sundaranar University. The departments were computer science, communication, criminology and commerce. Both under graduate and post graduate students participated. The student's age group was 17 to 23. After interacting with the students, the investigator developed rapport. After getting the consent from the participants, the personal data sheet was distributed and filled by the participants. It required 10 to 15 minutes to complete the data sheet. Consequently, both BDI-II and UCLA loneliness scale were administered separately. The administration of BDI-II took 15 minutes and UCLA loneliness scale took 10 minutes. The items in both questionnaires were read aloud by the investigator. The students were allowed to ask any doubts from the test items if any. It took around two months for collecting the needed data.

Research Design: Correlational research design was used to study the relationship between loneliness and depression.

Statistical Analysis: To full fill the objectives of this study the correlation and t-test were applied using SPSS.

Results and Discussion

Table 1 Shows the relationship between loneliness and depression among university students

Variable	Depression
Loneliness	0.33**

p ≤ 0.01 **

Table 1 shows the correlation coefficient r=0.33 is significant at 0.01 level.

There exists positive correlation between loneliness and depression. Hence when loneliness increases, depression tends to increase and vice versa.

Table 2: Shows the difference in the level of loneliness among sample who are single child and who are born with siblings.

Variable	Siblings	N	Mean	SD	t	Significance (2- tailed)
Loneliness	None	22	25.5	6.3	2.06	0.04*
	Present	78	22.7	5.3	1.88	0.07

p ≤ 0.05*

Table 2 shows that the mean of loneliness among sample who are single child is 25.5 and that of sample who were born with siblings is 22.7. The t-test analysis reveals t-value 2.06 and 1.88 for sample who are single child and who are born with siblings respectively. This indicates significant loneliness among sample who are single child at

0.05 level and that loneliness among sample who are born with siblings is not significant.

Table 3: Shows the difference between males and females in their level of loneliness and depression

Variable	Gender	N	Mean	SD	t	Significance (2- tailed)
Loneliness	Male	30	23.10	5.62	-0.34	0.74
	Female	70	23.51	5.66	-0.34	0.74
Depression	Male	30	17.47	6.69	-1.93	0.05*
	Female	70	21.17	11.26	-2.35	0.02*

p ≤ 0.05*

From table 3 it shows that the mean of loneliness among males is 23.10 and that of females is 23.51. The t-test analysis reveals t-value -0.34 and -0.34 for males and females respectively. The mean of depression among males is 17.47 and that of females is 21.17. This indicates there is no significant difference between males and females in their level of loneliness. And there is significant difference in the level of depression between males and females at 0.05 level.

Conclusion

1. There is positive correlation between loneliness and depression.
2. There is significant loneliness among sample who are single child compared to sample who are born with siblings.
3. There is significant difference in the level of depression between males and females.

Limitations of the Present Study

1. Use of convenient sampling method.
2. Representation of male and female population in the sample was not equal.
3. Influence of the family type and educational qualification of the sample on their level of loneliness and depression was not explored.

Recommendations for Future Research

1. Suicidal ideation can be included as a third variable and its relationship with Loneliness and Depression can be found.
2. Relationship between family type and level of loneliness as well as depression can be studied.
3. Causal relationship between loneliness and depression can be explored.
4. The same variables- Loneliness and Depression can be tested for their relationship in a different population.

References:

1. Osho (2010): Come follow to you, India; Rebel Publishers India Private Limited.
2. Trevor Hudson (2016): Beyond Loneliness- The Gift of God's Friendship; US, Upper Room Publishers.
3. Archana (2018): A study of the effect of sociability and shyness on depression and loneliness among educated youth <http://shodhganga.inflibnet.ac.in/handle/10603/113039> retrieved on 12.03.18



HAPPINESS AND SCREEN TIME AMONG UNIVERSITY STUDENTS

Mr. Vignesh Ramalingam

Assistant Professor, Department of Psychology, Manonmaniam Sundaranar University, Tirunelveli – 627012. Tamil nadu, India.

Ms. S.S. Srinithi *

Assistant Professor, Department of Psychology, Manonmaniam Sundaranar University, Tirunelveli – 627012. Tamil nadu, India. *Corresponding Author

ABSTRACT

To explore the level of happiness based on the screen time among university students, 114 postgraduate students from Periyar University, Salem has been chosen using convenient sampling. The amount of time students spend on screen was obtained through the personal data sheet while the level of happiness was assessed using the Oxford Happiness Questionnaire by Hills & Argyle (2001). Results were statistically insignificant but those who spent 2 to 3 hours of screen time were likely to be happiest.

KEYWORDS : Happiness, Screen time.**Introduction**

Professor Ojanen, a professor emeritus of psychology, an author as well as an active lecturer on the topic of happiness summarised his description of happiness (Ojanen, 2015):

"Happiness has been described in surprisingly various ways, but one good way of summing up the term has been the combination of pleasure and sensibleness. The sole act of pleasure is not enough, since a human being cannot always be in the state of constant pleasure – and moreover, we humans get used to most of the feelings linked to pleasure. Sensibleness is often born from serving others; satisfaction comes from satisfying our own needs. Combining these two creates happiness – both in the individual's life as well as happiness on a more common level."

Dr Manz describes, "Happiness is a state of mind, not a set of circumstances . . . you can never find happiness by "searching," because the moment you do, you imply it is found outside yourself. Happiness isn't outside you. It is a feeling—the natural feeling of your innate healthy psychological functioning. . . . When you understand that happiness is nothing more than a feeling, you can help it grow and maintain itself when you do feel it. . . . Happiness requires no effort at all. In fact, it's more of a letting go of unhappiness than it is a striving for happiness."

Hedonic Happiness

The quantity of life is more important to many people than the quantity of life. As for quality of life, happiness might be number one. Most people would likely hope for a happy and satisfying life, in which good things and pleasant experiences outnumber bad ones. Happiness seems to be an important part of how people define a good life. Defining the good life in terms of personal happiness is the general thrust of the hedonic view of well-being

The chief goal of life is the pursuit of happiness and pleasure. Within psychology, this view of well-being is expressed in the study of Subjective well-being

Subjective well-being is defined as life satisfaction, the presence of positive affect, and a relative absence of negative affect. Together, the three components are often referred to as happiness.

Eudaimonic Happiness

Is happiness enough for a good life? Would you be content and satisfied if you were happy and nothing else? We believe that there is more to life than happiness and subjective pleasure. Seligman describes it, there is a deeper and more "authentic happiness". Much of classical Greek philosophy was concerned with these deeper meanings of happiness and the good life.

Waterman (1990, 1993) describes two psychological views of happiness distilled from classical philosophy. Hedonic conceptions of happiness define enjoyment of life and its pleasures. The hedonic view

captures a major element of what we mean by happiness in everyday terms: We enjoy life; we are satisfied with how our lives are going; and good events outnumber bad events.

In contrast, eudaimonic conceptions of happiness, given fullest expression in the writings of Aristotle, define happiness as self-realization, meaning the expression and fulfilment of inner potentials. From this perspective, the good life results from living in accordance with your *daimon* (in other words, your true self). That is, happiness results from striving toward self-actualization—a process in which our talents, needs, and deeply held values direct the way we conduct our lives. "Eudaimonia" (or happiness) results from realization of our potentials. We are happiest when we follow and achieve our goals and develop our unique potentials. Eudaimonic happiness has much in common with humanistic psychology's emphases on the concepts of self-actualization and the fully functioning person as criteria for healthy development and optimal functioning. What kinds of experiences lead to eudaimonic happiness?

Eudaimonic happiness results from experiences of personal expressiveness. Such experiences occur when we are fully engaged in life activities that fit and express our deeply held values and our sense of who we are. Under these circumstances we experience a feeling of fulfilment, of meaningfulness, of being intensely alive—a feeling that this is who we really are and who we were meant to be (Baumgardner & Crothers, 2014)

Screen time is the amount of time spent using a device such as a computer, television, or video game console. It can be an element of a sedentary lifestyle. The use of the internet expanded in the 1990s. This caused the increase in the usage of devices that could access the internet and the increase in screen time. In 2001 an average user spent 83 minutes online (Wikipedia).

Review of Literature

In a survey that included questions about how much time the teens spent on their smart phones, tablets, and computers, as well as how often they interacted with their peers face-to-face. The teenagers were also asked about their general levels of happiness and well-being. Overall, the study found that teenagers who reported more on-screen time were, on average, less happy than those who spent more time in real life. Engaging in sports or having more face-to-face social interaction correlated with more happiness, while texting, playing video games, and using social media and instant messaging correlated with less happiness. **On the other hand complete screen abstinence did not correlate with happiness either. Actually, the teens who were the happiest reported using digital media a bit under 1 hour every day** (Jean, 2018).

Research Methodology

The present study attempts to verify the association between screen time and happiness among university post graduates.

Objectives

- To find the level of the happiness among university students
- To know the Screen time of university students – total hours spent in smart phone, internet and TV.
- To find significant difference among university students in the level of happiness based on screen time.

Hypothesis: There is significant difference among university students in the level of happiness based on screen time.

Method of Data Collection: This study adopted survey method.

Sample: Using the method of convenient sampling, 114 post graduate students belonging to various departments of the Periyar University were chosen to be the sample.

Tool Used: Along with the personal data sheet, The Oxford Happiness Questionnaire by Hills & Argyle (2001) with reliability (0.91) was used to collect data.

Results and Discussion

Table 1 : shows screen time of the sample per day

Screen Time (Per day)	N	Percent
Less than 2 hours	45	39
2 – 3 hours	28	25
Upto 4 hours	41	36
Total	114	100

Table 2: shows average level of happiness among the sample per day

Variable	N	Mean	SD
Happiness	114	118.38	17.580

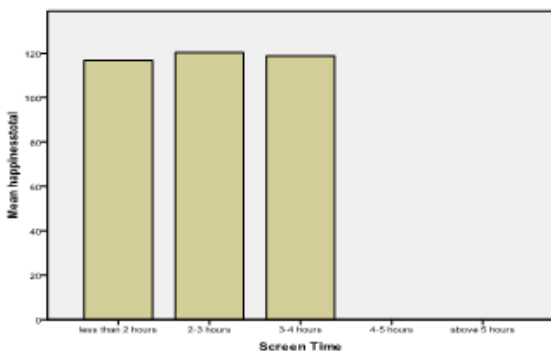
From table 1 and 2, it shows that the average level of happiness among the sample was 118.38 and out of 114 sample 39% spent less than two hours, 25% spent two to three hours and 36% spent up to 4 hours on screen per day.

Table 3: shows the difference in level of Happiness among university students based on screen time

Variable	Less than 2 hrs (N=45)		Between 2-4 hrs (N=28)		Above 4 hrs (N=21)		“F”- value
	M ₁	SD ₁	M ₂	SD ₂	M ₃	SD ₃	
Happiness	116.80	18.54	120.29	16.85	118.80	17.25	35.40 ^{NS}

NS- not significant

Figure 1: shows the difference in level of Happiness among university students based on screen time.



From the Table 3 and Figure 1, there is no significant difference among the university students in the level of happiness based on the screen time. Hence, the hypothesis – “There would be significant difference among university students in the level of happiness based on Screen time”, is rejected. Even though the findings are not significant, Students who spent two to three hours of screen time per day were found to be happiest.

Conclusion:

The University post graduates those who spent 2 to 3 hours of screen time were likely to be happiest.

Recommendations for further research

1. Large population based study is recommended.
2. Experimental research design can be included.

Limitations of the present study

1. Sample size is small.
2. The research design is devoid of experimental ambit.
3. The tool used for the study has unified dimension of measure.

REFERENCES

1. <https://www.medicalnewstoday.com/articles/320699.php>
2. Ojanen, M. (2015). Finding the happy. https://www.theseus.fi/bitstream/handle/10024/.../Nygren_Viola.pdf?...1&isAllowed.
3. https://en.wikipedia.org/wiki/Screen_time



ISSN (P) : 0975 1246

ISSN (O) : 2321 8835

www.voccoutreach.in

Outreach

ISRA Journal Impact Factor: 7.011

VOLUME X, SPECIAL ISSUE - I, 2017

Proceedings of the UGC Sponsored National Seminar on

Sports Medicine : Applications and Recent Trends

SMART 2017

Editor

Dr. P.Sivagnanam

Director of Physical Education

V.O.C. College, Thoothukudi

Department of Physical Education

V.O.Chidambaram College

Re-accredited by NAAC with 'A' Grade

Thoothukudi - 628008



Sl.No.	Title	Page No.
51.	Changes in Hematological Variables among Working Women due to the Influence of Yogic Practices Dr. S.Saroja	255
52.	Traditional Food: Coconut Milk and Healthy Life K.Satheesh Kumar and Dr. S.Arumugam	259
53.	Effect of Jump Metrics Training on Power Parameters among Inter Collegiate Football Players P. Selva Kumar	264
54.	Effect of Selected Asanas in Hatha Yoga Practices on Agility and Flexibility among Football Players C. Selvaraja and Dr. S.Arumugam	269
55.	Effect of Aerobic Dance on Selected Health Related Physical Fitness Variables among Obese School Boys A.Sridharan and Dr. S.Thirumalaikumar	275
56.	Martial Arts and Silambam Injuries M.Syed Ali and Dr. P.Kumaresan	280
57.	The Effectiveness of Undulating Periodization Pranayama Training on Spot Shooting Accuracy for School Basket Ball Players S.Thirumurugan and Dr. P.Sivagnanam	284
58.	Influence of Varied Breathing Exercises on Lung Capacity and Breath Holding Time among Soccer Players Dr. G.Vigneshwaran and Dr. R.Kalidasan	288
59.	Influence of Nadi-Shodhana Pranayama Training on Vital Capacity among College Students T.Vijaya, Dr. M.Elango and Dr. S.Arumugam	294
60.	Comparative Analysis of Neuroticism at Different Levels of Volleyball and Football Players C. Samson and R. Muthueleckuvan	299
61.	An Evaluation of the Sports Attainment, Motivation and Anxiety Level of Male Basketball and Cricket Players Dr. S. Venkatasubramoniam	303
62.	An Individual Muscle Exercise Program versus Physiotherapeutic Intervention for Rotator Cuff Weakness Dr. S. Babu Selvakumar and S. Padmashri	308

Martial Arts and Silambam Injuries

M. Syed Ali

Assistant Director of Physical Education
Sadakathullah Appa College, (Autonomous), Tirunelveli.

Dr. P. Kumaresan

Associate Professor, Department of Physical Education, Health Education & Sports
The M.D.T Hindu College, Tirunelveli.

Introduction

Martial arts are great as spectator sports and a good way to get fit, but they really come into their own when they are used in self-defence – undoubtedly the ultimate result for many of them. The earliest evidence for specifics of martial arts as practiced in the past comes from depictions of fights, both in figurative art and in early literature, besides analysis of archaeological evidence, especially of weaponry. The oldest work of art depicting scenes of battles, dating back 3400 BC, was the ancient Egyptian paintings showing some form of struggle. Dating back to 3000 BC in Mesopotamia (Babylon), reliefs and the poems depicting struggle were found. In Vietnam, drawings and sketches from 2879 BC describe certain ways of combat using sword, stick, bow, and spears. A number of south Asian fighting styles remain closely connected to yoga, dance and performing arts. Some of choreographed sparring in silambam can be applied to dancers who knew silambam were believed to be markedly better than other performers. Until recent decades, the “chhau” dance was performed only by martial artists. Some traditional Indian classical dance schools still incorporate martial arts as part of their exercise regimen. Written evidence of martial arts in Southern India dates back to the Sangam literature of about the 2nd century BC to the 2nd century AD. The Tamil poems Akananuru and Purananuru describe the use of spears, swords, shields, bows and silambam in the Sangam era. There are references to the silambam staff which is in great demand with foreign visitors. Some traditional Indian classical dance schools still incorporate martial arts as part of their exercise regimen.

Training

The most important aspect of martial arts training or aerobic silambam training is that the student or participant must stretch extensively before a training session. By stretching the

amount of minor soft tissue injuries such as muscle strains, tendon strains will be decreased. Stretching should be performed for a minimum of fifteen minutes before performing any rotating or fencing techniques.

Injuries that can occur vary from minor injuries to severe de-habilitating injuries. When assessing aerobic Silambam, injuries that occur are generally minor. Common podiatric related injuries when performing aerobic Silambam is plantar fasciitis, Achilles tendonitis, seasmoiditis, ankle sprains. When looking at traditional martial arts which involve staff, weapons, and another student, the injuries become more extensive. In addition to the injuries mentioned above, traditional martial arts injuries include; fractures, hematomas, and dislocation joints and tendons.

Plantar fasciitis

Plantar fascial injuries can occur when training due to the constant pivoting and elevation of the foot while performing fencing. The mechanics of performing a front or roundhouse type beat involves the supporting staff to pivot on the ball of the foot, while the other Staff is in the air striking the target. Fascial injury can occur on the supporting staff due the strain on the fascia, or a fascial injury can occur to the striking Staff to the repetitive pushing off and tightening of the fascia when beginning the beat, or when the beating is concluding which causes the beating staff return to the ground which causes tightening of the fascia. The pain will be located at the inside of the heel and at the bottom of the heel when this type of injury occurs.

Achilles Tendonitis, is another common injury during martial arts training. The Achilles tendon is involved bringing the foot into position for many of the Beats , and is also responsible for the initiating motion when performing a Beat Since the amount of Beats performed in a training session can be over 500, an overuse injury to the Achilles tendon can cause a tendonitis when training.

Seasmoiditis, is another type of repetitive motion related injury. When performing Beats properly, the supporting foot is elevated onto its metatarsal heads, which allows the supporting leg to pivot. The long bone behind the big toe has two small round shaped bones underneath the head of this bone. These bones can become irritated and inflamed and cause pain just behind and under the big toe.

As with many other sports, ankle sprains are very common in martial arts training. The abundance of side-to-side motion and one limb support while Beating makes this injury a common one when training.

Basic Treatment Recommendations

With the four injuries listed above, basic treatment of resting the injury, icing the injury, and elevating the extremity should be performed. If the conditions persist after a few days of rest, ice, and elevation. Further assessment should be performed by a podiatrist.

Other Injuries

With the addition of contact activities in traditional martial arts, fractures are common in the foot and ankle. Common types of fractures while training are digital fractures, and metatarsal fractures. With these types of injuries, the pain is severe and often results in the inability to bear weight on the limb. Swelling and bruising will often accompany the fracture. If any injury is severe enough to hinder your ability to walk, and a fracture is suspected, it is recommended that you visit your podiatrist so x-rays of the area can be taken. Hematoma formation may be the most common injury in the traditional martial artist. Hematoma is caused when the foot or leg strikes the target improperly or strikes a target which is not padded well. Objects such as bony prominences, a Staff, or even defence weapons. What occurs is that by striking this object multiple vascular structures are disrupted causing bleeding inside the foot or leg. This will cause the foot to swell most commonly on the top of the foot, and the swelling causes pressure on the nervous structures which will result in pain. Hematomas can occur with or without fractures of the bones. The primary treatment for this type of injury is again rest, ice, compression, and elevation. It is very important thought to assess this injury properly. If you notice that the toes are cold, and the pain is very severe you must immediately have the injury assessed at a hospital or an urgent care center. A condition called Compartment Syndrome can occur in this area which if not treated immediately, can result in loss of your foot.

Dislocation of joints in martial arts will involve the digits the majority of the time. With traditional martial arts the training is performed without shoe gear. This allows the

digits to be exposed and vulnerable to dislocation. If a digit becomes dislocated, see your podiatrist as soon as possible to avoid any long-term complications in that digit.

Tendon dislocation can also occur as a result of martial arts training. The primary tendon which can dislocate when training is the peroneal tendon which runs just behind the fibula. Often times this injury is mistaken for an ankle sprain. The characteristic of this injury is that the tendon which is usually behind the fibula will pop around the outside of the bone when the foot is pushed up. The injury will feel much like an ankle sprain. If you notice the tendon displacing in this way, or you notice that what you thought was an ankle sprain is not getting better you should see your podiatrist for further evaluation.

Conclusion

Martial arts are an excellent method of exercise and stress relief. As with any type of exercise, injuries are a common occurrence. Being able to identify the type of injury and the proper treatment modality will allow for a faster recovery and a faster return to activity.



**Department of Physical Education
V.O.Chidambaram College, Thoothukudi**

(Re-accredited with 'A' Grade by NAAC)

UGC Sponsored National Seminar on

Sports Medicine: Applications and Recent Trends

3rd & 4th March 2017

Certificate



SMART 2017

This is to certify that Dr./Mr./Ms./ *M. Syed Ali*, Director of physical Education
Sadakatullah Appa College Rahath Nagar-627011 participated and presented
a paper titled *Martial Arts and Pilambam Injuries*
in the UGC sponsored National Seminar on **"Sports Medicine: Applications and Recent Trends"**
organized by the Department of Physical Education, V.O.Chidambaram College, Thoothukudi on 03.03.2017
and 04.03.2017.

P. Sivagnanam
(Dr. P. Sivagnanam)
Organising Secretary

C. Veerabahu
(Dr. C. Veerabahu)
Principal

International Conference
on
**HEALTH INDICATORS FOR PHYSICAL AND
COGNITIVE FITNESS EDUCATION**
Volume - II



Editors
Prof. P. Sivakumar
Prof. K. Balasubramanian



Organized by
FACULTY OF EDUCATION
ALAGAPPA UNIVERSITY

(A State University Re-accredited with 'A' Grade by NAAC)
Karaikudi.



Effect of Martial art Training on Motor Fitness Variables for Higher Secondary School Level Silambam Players <i>M.Syed Ali & Dr.P.Kumaresan</i>	287
Effect of Weight Training and Fartlek Training on Selected Physiological Variables among College Men Students <i>Dr.S.Saroja</i>	291
Effects of Selected Asanas and Aerobic Exercises On Cardio-Vascular Efficiency Of College Women Students <i>V. Savitha & Dr.S. Saroja</i>	294
Effect of Land Aerobic and Water Aerobic Dancing on Cardio Respiratory Endurance of Overweighed School Boys <i>Joshy P.J Dr.K. Balasubramanian</i>	297
Effect of Selected Yogic Practices on Minimum Muscular Fitness and Flexibility for Men <i>Shajan Varghese. T</i>	300
Impact of Speed, Agility, Quickness Drills (SAQ) and Small Sided Games (SGP) Practice on Selected Performance Parameter of Junior Soccer Players <i>Sinoj Joseph & Dr.K. Balasubramanian</i>	304
Impact of Different Intensities of Circuit Trainings on Selected Strength and Endurance Parameters of Women Hockey Players <i>M.Suresh Kumar & Dr.S.Saroja</i>	307
Effect of Yoga On Selected Bio-Chemical Variables among Middle Aged Men <i>T.P.Yokesh</i>	311
Effect of Yogic Practices and Physical Exercise on Muscular Strength Self-Concept and Blood Pressure <i>Ms. V. Saratha & Dr. S. Chidambara Raja</i>	314
Effect of Yogic Practices on Blood Pressure and Blood Glucose among Women Diabetic Patients <i>G. Valarmathy & Dr.S.Saroja</i>	317

VOLUME II

Effect of Skipping and Medicine Ball Exercise on Selected Physical Fitness Variable <i>Sathyaraj.S & Dr K Balasubramanian</i>	319
Effect of Continuous Running, Fartlek and Interval Training on Selected Motor Abilities, Variables of Male Football Players <i>Dr.Sudhakar Babu Mande & Dr.P.P.S.Paul Kumar</i>	321
Effect of Yogic Training and Brisk Walking on Selected Physiological Variable (Mean Arterial Blood Pressure) among Diabetic Patients <i>Dr.P.P.S.Paul Kumar</i>	327
Effect of Aerobic Training on Selected Physical and Physiological Variables among College Level Men Basketball Players <i>S. Chithambaram & Dr. C. Ramesh</i>	333
The Role of E-Resources in Research with Reference to Alagappa University Research Scholars - A Case Study <i>C.Senthil Kumar & Dr.K.Balasubramanian</i>	337

EFFECT OF MARTIAL ART TRAINING ON MOTOR FITNESS VARIABLES FOR HIGHER SECONDARY SCHOOL LEVEL SILAMBAM PLAYERS

M.Syed Ali*

Dr.P.Kumaresan**

INTRODUCTION:

Martial arts are great as spectator sports and a good way to get fit, but they really come into their own when they are used in self-defence – undoubtedly the ultimate result for many of them. The earliest evidence for specifics of martial arts as practiced in the past comes from depictions of fights, both in figurative art and in early literature, besides analysis of archaeological evidence, especially of weaponry. The oldest work of art depicting scenes of battles, dating back 3400 BC, was the ancient Egyptian paintings showing some form of struggle. Dating back to 3000 BC in Mesopotamia (Babylon), reliefs and the poems depicting struggle were found. In Vietnam, drawings and sketches from 2879 BC describe certain ways of combat using sword, stick, bow, and spears. A number of south Asian fighting styles remain closely connected to yoga, dance and performing arts. Some of choreographed sparring in silambam can be applied to dancers who knew silambam were believed to be markedly better than other performers. Until recent decades, the “chhau” dance was performed only by martial artists. Some traditional Indian classical dance schools still incorporate martial arts as part of their exercise regimen. Written evidence of martial arts in Southern India dates back to the Sangam literature of about the 2nd century BC to the 2nd century AD. The Akananuru and Purananuru describe the use of spears, swords, shields, bows and silambam in the Sangam era. This referred to the *silambam* staff which has in great demand with foreign visitors some traditional Indian classical dance schools still incorporate martial arts as part of their exercise regimen.

Silambam

Silambam is a weapon-based Dravidian martial art from Tamil Nadu. In Tamil, the word silambam refers to the bamboo staff which is the main weapon used such as the maduvu (deer horn), kathi (knife), vaal (sword), stick (kali or kaji), dagger (kuttuvai), knuckle duster (kuttu katai), and whips with several flexible and metallic blades (surul pattai). Unarmed silambam, called kuttu varisai, utilizes stances and routines based on animal movements such as the snake, tiger, elephant and eagle forms. There are numerous sub-sects in silambam like nagam-16 (cobra-16), kallapathu (thieves ten), kidamuttu (goat head butting), kuravanchi, kalyanavarisai (similar to quarterstaff), thulukkanam, and so on. Each is unique and may differ from one another in grip, posture, foot work, method of attack, length of the stick, movement of the stick etc. Separate practice is needed for staffs of different lengths. Beginners are taught footwork (kaaladi) which they must master before learning spinning techniques and patterns, and methods to change the spins without stopping the motion of the stick. There are sixteen of them among which four are very important. Footwork patterns are the key aspects of silambam and kuttu varisai (empty hands form). Traditionally, the masters first teach kaaladi for a long time before proceeding to kuttu varisai. Training in kuttu varisai allows the practitioner to get a feel of silambam stick movements using their bare hands, that is fighters have a preliminary training with bare hands before going to the stick. Gradually, fighters study footwork to move precisely in conjunction with the stick movements. The ultimate goal of the training is to defend against multiple armed opponents. In silambam as well as kuttu varisai, range of the opponent without lowering one's defiance, aids in hitting and blocking, and it continues the battle. The whole body is used to create power. In this study it implies the specificity principle regarding the present stretch condition of the muscle prior to explosive contraction. Millions of athletes are practicing games and sports regularly often these young athletes are disadvantaged. The lack of sufficient physical preparation to execute power movement. This problem can be eliminated by implementing development program for the subjects. So in this study, silambam training selected as independent variable to test the improvement of selected criterion variables of 16 and 19 years old students.

Methodology

The purpose of the study is to find out the influence of silambam on grip strength, reaction time, movement time and eye hand co-operation of school students. **Grip strength:** Grip dynameter of the rectangular type was used to measure grip strength, both right and left hand tested. The collected data from the two groups prior to and after experimentation on selected variables were statistically examined for significant difference between selected groups. So need not use any one of the post hoc test, to determine which the paired means difference was significant. In all the cases to test the significant, 0.05 level of confidence was utilized.

Statistical analysis

The Univariate analyses of variance ANOVA test was performed to investigate the comparisons between the control and experimental group involved in silambam among school students. The level of significance was set at $p < 0.05$ and all data are presented as Mean and SD. The test-retest reliability was obtained through the Intra-class Correlation Coefficient (ICC). The SPSS 20 Software was adopted for this analysis.

Table:1

ANALYSIS OF COVARIANCE FOR THE DATA ON RIGHT HAND GRIP STRENGTH OF SILAMBAM AND THE CONTROL GROUP

Groups	Silambam group	Control group	Sources Of variance	Sum of squarers	df	Means squarers	"F" ratio
Pre test	29.87	26.87	B:	-120.26	1	-12036.26	-26.51
Mean Sd	5.45	5.23	W:	12714.23	28	454.08	
Post test	45	27.07	B:	-17458	1	-1754458	-24.07
Mean SD	7.65	5.58	W:	20306.47	28	725.23	
Adjusted	41.14	28.93	B:	522.43	1	522.43	16
Post test mean			W:	855.09	27	31.66	

* $F_{.05}(1,28)=4.20, F_{.05}(1,27)=4.21$

Table 1 shows that the pre-test means n right hand grip strength of silambam training group 29.87 kg, and that of control group 26.87 kg. Results in an F ratio of -26.51, which indicates that, statistically insignificant difference between the pre-test means at .05 level of confidence. The post test means of silambam training group is 45kg and control group is 27.07kg, with an F ratio of -24.07, which is insignificant at .05 level of confidence. The adjusted post-test mean 41.14kg, for silambam training group and 28.93 kg. for the control group have an "F" ratio of -16.50*, which is insignificant at .05 level of confidence. The results of the study indicate that there is significant variance in right hand grip strength between silambam training group and control group, after the training period. Since only two groups are involved using any one post hoc test is not necessary. Only the adjusted post mean of both group enough to find significant difference between the groups. The adjusted post-test means of silambam training group and control group are 41.14 and 28.93kg, respectively. The results of the adjusted post-test means indicates that due to the training program. The silambam training group gained right hand grip strength significantly when compared to the control group.

DETAILS OF RIGHT HAND GRIP STRENGTH OF SILAMBAM GROUP AND THE CONTROL GROUP

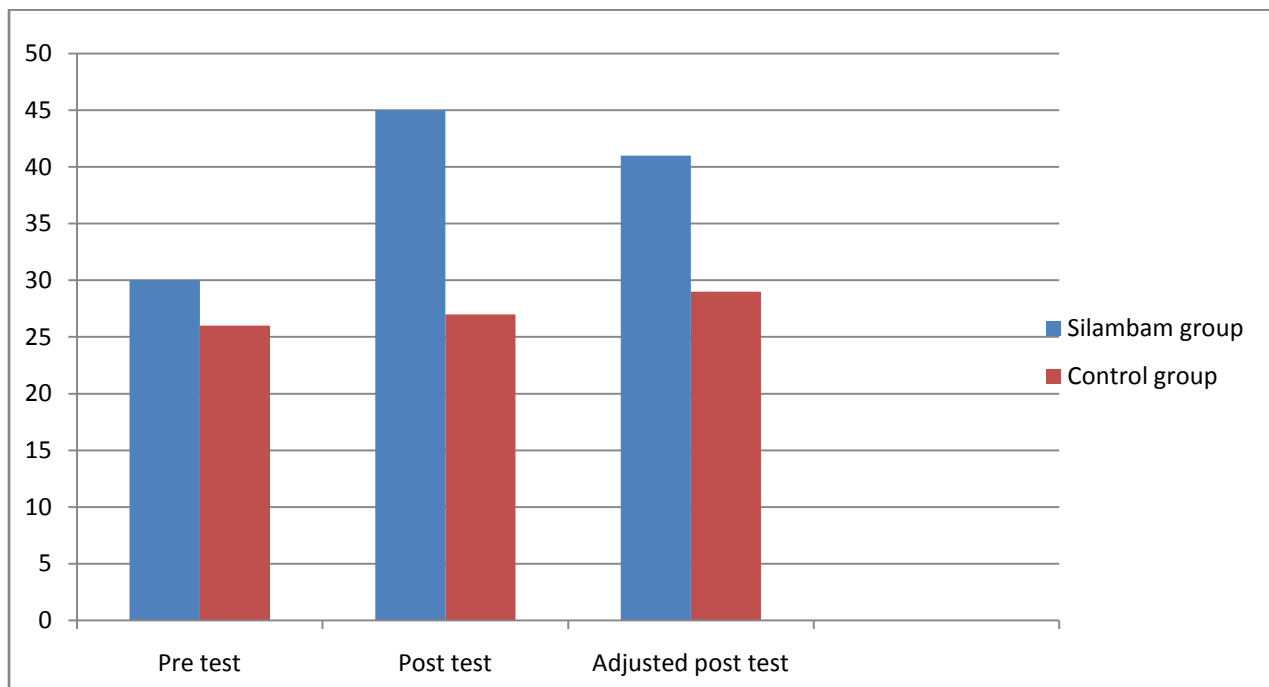


Table:2

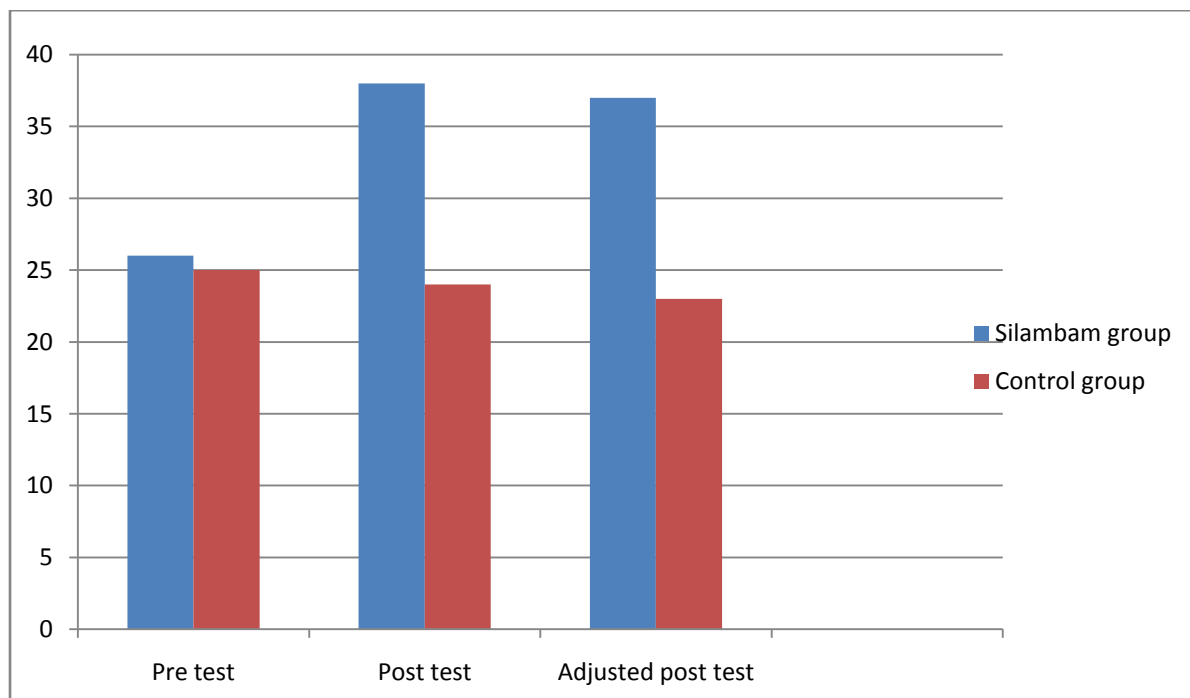
ANALYSIS OF COVARIANCE FOR THE DATA ON LEFT HAND GRIP STRENGTH OF SILAMBAM AND THE CONTROL GROUP

Groups	Silambam group	Control group	Sources Of variance	Sum of squares	df	Means squares	"F" ratio
Pre test	26.13	24.87	B:	-9747.73	1	-9747.73	-21.61
Mean Sd	4.39	6.75	W:	12627.33	28	450	
Post test	38.27	23.6	B:	-13546	1	-13456	-24.07
Mean SD	6.35	6.11	W:	15604.27	28	557.30	
Adjusted	37.52	22.9	B:	602.81	1	602.81	13.8*
Post test mean			W:	1214.8	27	44.99	

$$*F_{.05}(1,28)=4.20, F_{.05}(1,27)=4.21$$

Table 2 shows that the pre-test means in left hand grip strength of silambam training group 26.13 kg, and that of control group 24.87 kg. Results in an F ratio of -26.61, which indicates that, statistically insignificant difference between the pre-test means at .05 level of confidence. The post test means of silambam training group is 38.27kg and control group is 23.6kg, with an F ratio of -24.31, which is insignificant at .05 level of confidence. The adjusted post-test mean 37.52kg, for silambam training group and 22.9 kg. for the control group have an "F" ratio of -13.8*. which is insignificant at .05 level of confidence. The results of the study indicate that there is significant variance in left hand grip strength between silambam training group and control group, after the training period. Since only two groups are involved using any one post hoc test is not necessary. Only the adjusted post mean of both group enough to find significant difference between the groups. The adjusted post-test means of silambam training group and control group are 38.27 and 22.9kg, respectively. The results of the adjusted post-test means indicates that due to the training program. The silambam training group gained left hand grip strength significantly when compared to the control group.

DETAILS OF LEFT HAND GRIP STRENGTH OF SILAMBAM GROUP AND THE CONTROL GROUP



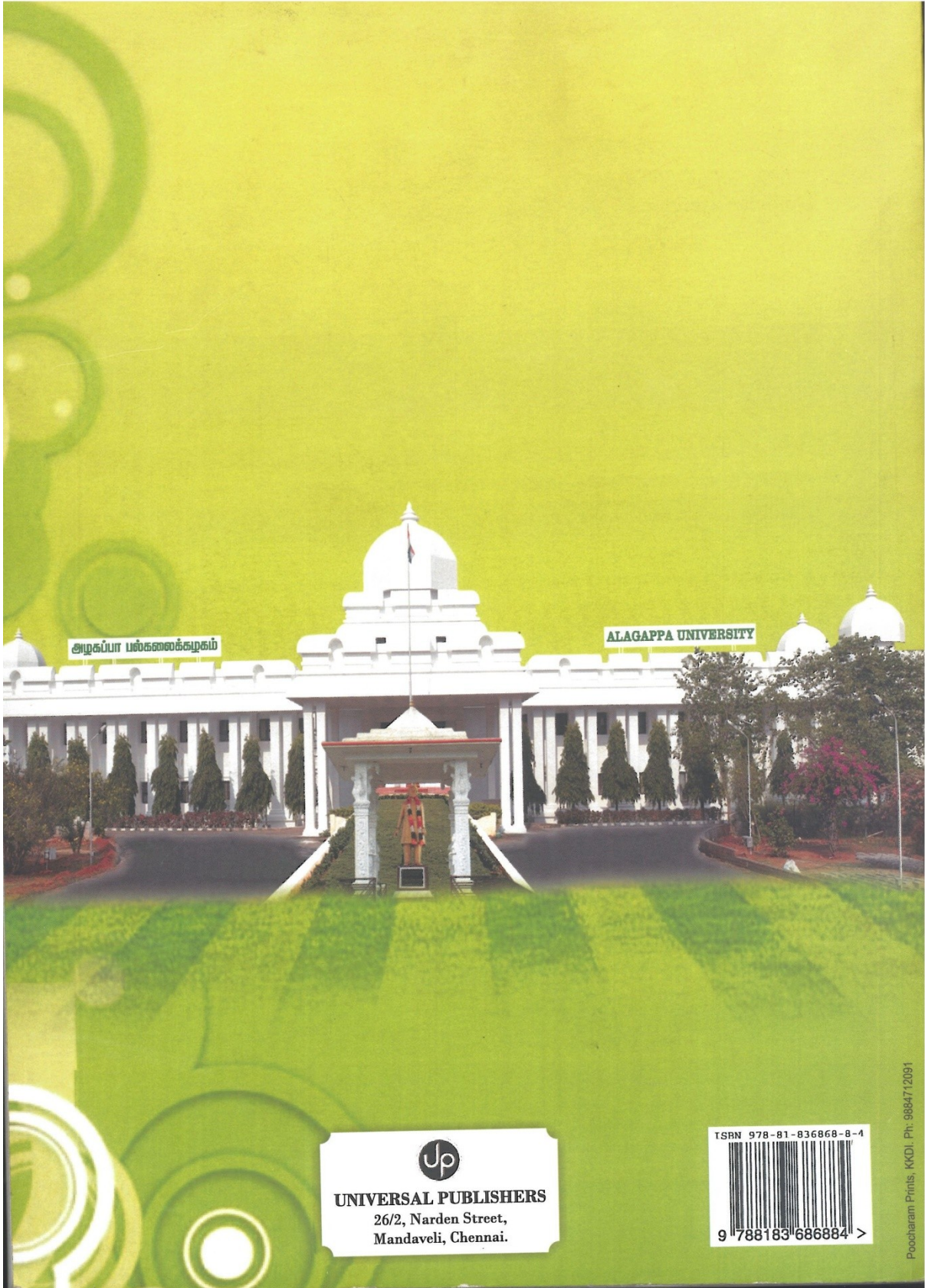
The results of the study reveals that the silambam training increased in performance.

- i. The results of the s study reveals that the right hand grip strength has improved at the level of 197kg. average of one person right hand grip strength was 13.13kg has improved.
- ii. The left hand grip strength has improved at the level of 180kg. average of one person left hand grip strength was 12 kg has improved. So the right hand grip strength has improved 1.13kg than the left hand grip strength.

Physical fitness comprises two related concepts: general fitness (a state of health and well-being) and specific fitness (a task –oriented definition based on the ability to perform specific aspects of sports or occupations. In previous years, fitness was commonly defined as the capacity to carry out the day's activities without undue fatigue. However, as automation increased leisure time, changes in lifestyles following the industrial revolution rendered this definition insufficient. These days, physical fitness is considered a measure of the body's ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist hypo kinetic diseases, and to meet emergency situations. To date, many common beliefs with regard to the social-psychological outcomes of martial arts practice exist, ranging from very positive. To formulate more thoughtful and scientifically based statements, in recent years, researches have become more interested in martial arts. Next to an increased number of scientific meetings and publications with regard to martial arts, also a significant growth in the number of presentations on martial arts at sports scientific congresses has been detected. Furthermore, a number of trends may be noticed regarding research on social-psychological outcomes of martial arts practice. While earlier studies focused on a more general population, in more recent years, there has been a shift in attention to younger participations.

References

1. Master Murugan, Chillayah (20 October 2012). "Silambam Fencing and play variation". Silambam. Retrieved 31 May 2013.
2. Raj, J. David Manuel (1977). *The origin and the Historical Development of Silambam Fencing: An Ancient Self-Defence Sport of India*. Oregon: College of Health, Physical Education and Recreation, Univ. of Oregon. pp. 44, 50, & 83.
3. Sports Authority of India (1987). *Indigenous Games and Martial Arts of India*. New Delhi: Sports Authority of India. pp. 91 & 94.
4. Crego, Robert(2003). *Sports and Games of the 18th and 19th Centuries* pg 32. Greenwood Press
5. Green, Thomas A., ed. (2001). *Martial Arts of the World: An Encyclopedia*. ABC-CLIO. pp. 176-177. ISBN 9781576071502.



அழகப்பா பல்கலைக்கழகம்

ALAGAPPA UNIVERSITY



UNIVERSAL PUBLISHERS
26/2, Narden Street,
Mandaveli, Chennai.

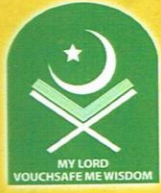
TSRN 978-81-836868-8-4



9 788183 686884 >

Poocharam Prints, KKDI, Ph: 9884712091

ISSN 2347-7644



Sadakath

A Research Bulletin

Vol. III

No. 2

Jan 2016



Published by

Sadakathullah Appa College
(Autonomous)

(Reaccredited by NAAC at an 'A' Grade with a CGPA of 3.40 in the III Cycle)
(An ISO 9001:2008 Certified Institution)

Rahmath Nagar, Tirunelveli - 627 011, India.

Phone Number : 0462 - 2540763

Website : www.sadakath.ac.in

Contents

S. No.	Title	Page No.
1.	Child Rights in Islam – A Study <i>K.F. Jaleel Ahamed</i>	1
2.	Formation of Labour Unions <i>Dr. S. Lalitha</i>	8
3.	A Study of Users' Satisfaction Level on Sources and Services Available in Tirunelveli District Central Library <i>Dr. A. Thirumagal, M. Mani</i>	14
4.	Fractal Sequences <i>R. Sivaraman, Dr. Sonal Badri</i>	24
5.	Crime Reporting in <i>The Hindu</i> and <i>The New Indian Express</i> – A Study <i>Dr. S. Mohamed Haneef</i>	29
6.	Ads and Words: An Innovative Method of the English Language Teaching <i>K. Syed Ali Bhadhusa</i>	33
7.	Vilification of Muslims: A Reading of Philip Massinger's <i>The Renegado</i> <i>S. Khaleel Ahamed</i>	43
8.	Biosynthesis of ZnO Nanoparticles using <i>Ficus Carica</i> leaf extract and their biological evolution of antibacterial activity <i>Dr. M. Sheik Muhideen Badhusa</i>	47
9.	Simulation of Phase Screen and Characterization <i>M. Mohamed Ismail, Dr. M. Mohamed Sathik</i>	54
10.	Formulation and Standardization of Functional Foods Incorporated Chikkies to Improve the CD4 Cells <i>V. Angel Mary</i>	65
11.	A Study on the Problems Faced by Brick Industry with Special Reference to Srivaikundam Taluk <i>Dr. A. Hamil, Ed. Priyadharshini</i>	74
12.	Influence of Kalari Training on Select Motor Fitness Variables among School Boys <i>M. Syed Ali, Dr. P. Kumaresan</i>	91

Influence of Kalari Training on Select Motor Fitness Variables among School Boys

M. Syed Ali¹, Dr. P. Kumaresan²

Abstract: The purpose of the study is to find out the influence of traditional training on select motor fitness variables of school level kalari players. Thirty kalari players were randomly selected as subjects. The selected subjects were divided into two equal groups consisting of fifteen each. This study consisted of two groups such as kalari training group and control group. All the subjects were tested prior to and after the experimentation on arm strength, reaction time, and eye-hand co-ordination. The collected data were statistically analyzed by using analysis of covariance. The result reveals that there is a significant difference between the experimental groups and the control group on the selected motor fitness variables.

Keywords: Martial Arts, Kalari, Motor Fitness Variable, Self Defence, Physical Exercise.

Introduction:

Martial arts is a part of India's ancient culture and is a traditional game. Originally a traditional form of martial art started in South India, and now it has different names and different forms in the varied culture and various regions in India. Khusti, the Indian Wrestling is also a part of Indian Martial arts found throughout India. Indian martial art has an important influence in the development of Asian martial arts. A lot of people now-a-days opt for martial arts for self-defense and for fitness as well. As in other cultures, Indian martial arts can be roughly divided into northern and southern styles. Fighting is as ancient as Man himself. This struggle to subdue another in combat, unarmed or armed, is possibly a legacy handed down to us from our ancestors. This desire for domination sowed the seeds for martial arts. The term martial arts, simply means arts concerned with the waging of war'. Many of the martial arts we know today originated from ancient war skills. Man's search for a more profound meaning of life, led to

-
- 1 Assistant Director of Physical Education, Department of Physical Education, Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli, India.
 - 2 Associate Professor, Department of Physical Education, Health Edu & Sports, The M.D.T. Hindu College, Tirunelveli, India.
-

the development of a higher level of fighting. Although the fighting arts in each nation differ from one another, there is a common thread in the tapestry of martial art-unanimity. Large number of people are attracted to this art because of its self-defensive potential. Once judo was the main focus of interest, but since it became an Olympic game Du-jutsu attracted those who wish to be stronger, fitter, and more self-confident.

Kalari Training :

'Kalari' is the Malayalam word for a special kind of gymnasium. It had its origins in the 4th century A.D. Legends claim that the art began with the sage parasurama, who possessed mystical powers. He built temples and also introduced martial arts, which have influenced and shaped many other arts. The art reached its zenith in the 16th century, in the days of Thacholi Othenan - a celebrated chieftain of north Malabar. Kalari training demonstration includes physical exercises and mock duels-armed and unarmed combat. It is not accompanied by any music or drumming, but is a silent combat, where style matters the most. Kalari is practised by women also. Today, Kalari is a method of physical fitness, and an empty-handed means of self-confidence. Yet, it is tied to traditional ceremonies and rituals. Kalari hand to hand techniques are theorized by some to be a major influence on "northern styles" of Chinese Kung Fu, because of their long range, circular, attacks. Kalari hand to hand techniques derive power not from physical strength or body weight but from spinning. The propensity for spinning attacks involves crescent kicks, sidekicks and palm strikes. Some of the Kalari techniques seem to be for demonstration purposes only, as some of the throws land the opponent on all fours, as opposed to judo in which one throws the opponent on their back, assuming they know how to break their fall. Though once outlawed during British rule, Kalari is making a comeback; it is in some ways a martial art frozen in time. Kalari trainee who masters the basic postures goes on to body toning exercises. The practise of these exercises leads to maximum agility, suppleness, the ability to twist or turn the body in every conceivable manner, and to the ability to suddenly leap in the air with ease. These exercises enable the trainee to save himself/herself from unexcepted assaults, and to outwit and eventually defeat the opponent, even if the opponent is armed. So in this study, kalari training is selected as an independent variable to test the improvement of selected criterion variables of 16 and 19 years old students.

Methodology:

The purpose of the study is to find out the influence of kalari on arm strength, reaction time, and eye-hand co-ordination of school students. Arm

strength is measured by number of pushups taken by the subjects. Reaction time is measured by nelson reaction timer, and eye hand co-ordination is measured by the subjects who throw a tennis ball over hand at a target from 10m distance. The collected data from the two groups prior to and after experimentation on selected variables were statistically examined for significant difference, if any applying the analysis of ANCOVA. This is enough to find significant difference between the selected groups. In all the cases to test the significant, 0.05 level of confidence was utilized.

Statistical Analysis:

The Univariate analysis of variance ANOVA test was performed to investigate the comparisons between the control and experimental group involved in kalari among school students. The level of significance was set at $p < 0.05$ and all data are presented as Mean and SD. The test-retest reliability was obtained through the Intra-class Correlation Coefficient (ICC). The SPSS 20 Software was adopted for this analysis.

Table 1
Analysis of Covariance for the Data on Arm Strength of Kalari and the Control Group

Groups	Kalari Group	Control Group	Sources of variance	Sum of squares	df	Means squares	"F" ratio
Pre test	26.13	14.13	B:	-4028	1	-4028	-
Mean±_Sd	±4.39	3.05	W:	4579.39	28	454.08	23.76
Post test	38.27	13.93	B:	-	1	-	-
Mean ±SD	±6.35	±3.29	W:	5698.73	28	5698.73	21.12
Adjusted	24.18	16.96	B:	166.22	1	166.2	-
Post test mean			W:	472.02	27	17.48	9.51*

* $F_{.05}(1,28)=4.20$, $F_{(.05)}(1,27)= 4.21$

Table 1 shows the pre-test means in arm strength of kalari training group is 26.13 kg, and that of control group is 14.13 kg. Results in an F ratio of -23.76, indicates the statistically insignificant difference between the pre-test means at .05 level of confidence. The post test means of kalari training group is 38.27kg and the control group is 13.93kg, with an F ratio of -21.12, which is insignificant at .05 level of confidence. The adjusted post-test mean is 24.18kg, for kalari training group and 16.96kg for the control group. They have an "F" ratio of 6.35 which is insignificant at .05 level of confidence. The results of the study indicate that there is significant variance in arm

strength between kalari training group and control group after the training period. Since only two groups are involved using any one post hoc test is not necessary. Only the adjusted post mean of both group is enough to find the significant difference between the groups. The adjusted post-means of kalari training group and control group are 24.48 and 16.96kg, respectively. The results of the adjusted post-test means indicate that due to the training programme the kalari training group gained arm strength significantly when compared to the control group.

Details of Arm Strength of Kalari Group and the Control Group

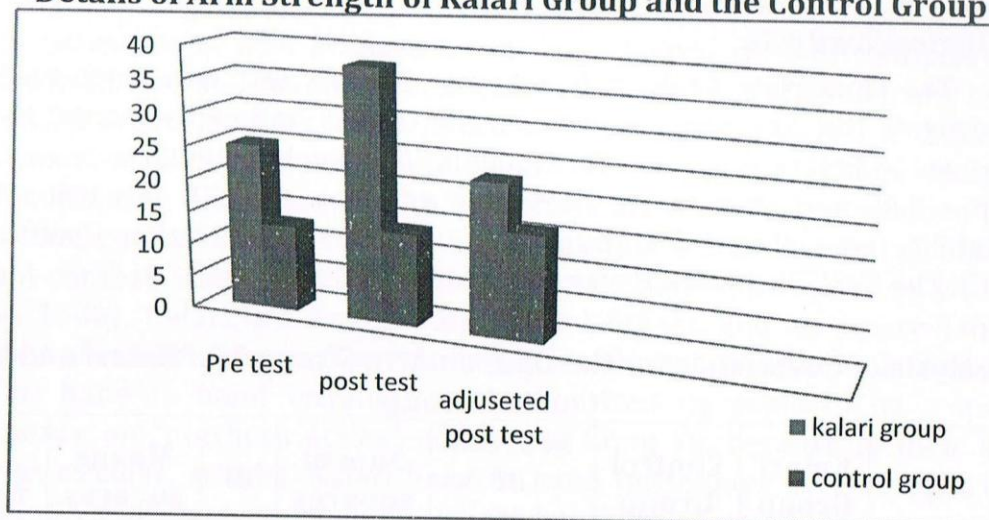


Table 2

Analysis of Covariance for the Data on Reaction Time of Kalari and the Control Group

Groups	Kalari Group	Control Group	Sources of variance	Sum of squares	df	Means squares	"F" ratio
Pre test	.225	.261	B:	-.879	1	-.879	-
Mean±_Sd	±.014	.021	W:	-0.9	28	0.32	27.47
Post test	.191	.263	B:	-.755	1	-.755	-
Mean ±SD	±.009	±.091	W:	.801	28	.029	26.03
Adjusted	.174	.264	B:	5.983	1	5.983	27.2*
Post test mean			W:	6	27	.22	

*F.05(1,28)=4.20, F(.05) (1,27)= 4.21

Table 2 shows that the pre-test means in reaction time of kalari training group is 0.22 seconds, and that of control group is 0.261 seconds. Results in an F ratio of -27.47 indicates the statistically insignificant difference between the pre-test means at .05 level of confidence. The post test means of kalari training group is 0.91 seconds and control group is 0.263 seconds, with an F ratio of -26.03, which is insignificant at .05 level of confidence. The adjusted post-test mean is 0.174 seconds, for kalari training group and 0.24 seconds for the control group. They have an "F" ratio of 27.2 which is insignificant at .05 level of confidence. The results of the study indicate that there is significant variance in reaction time between kalari training group and control group, after the training period. Since only two groups are involved using any one post hoc test is not necessary. Only the adjusted post mean of both group is enough to find significant difference between the groups. The adjusted post-test means of kalari training group and control group are .174 seconds and .246 seconds, respectively. The results of the adjusted post-test means indicate that due to the training programme, the kalari training group gained reaction time significantly when compared to the control group.

Details of Reaction Time of Kalari Group and the Control Group

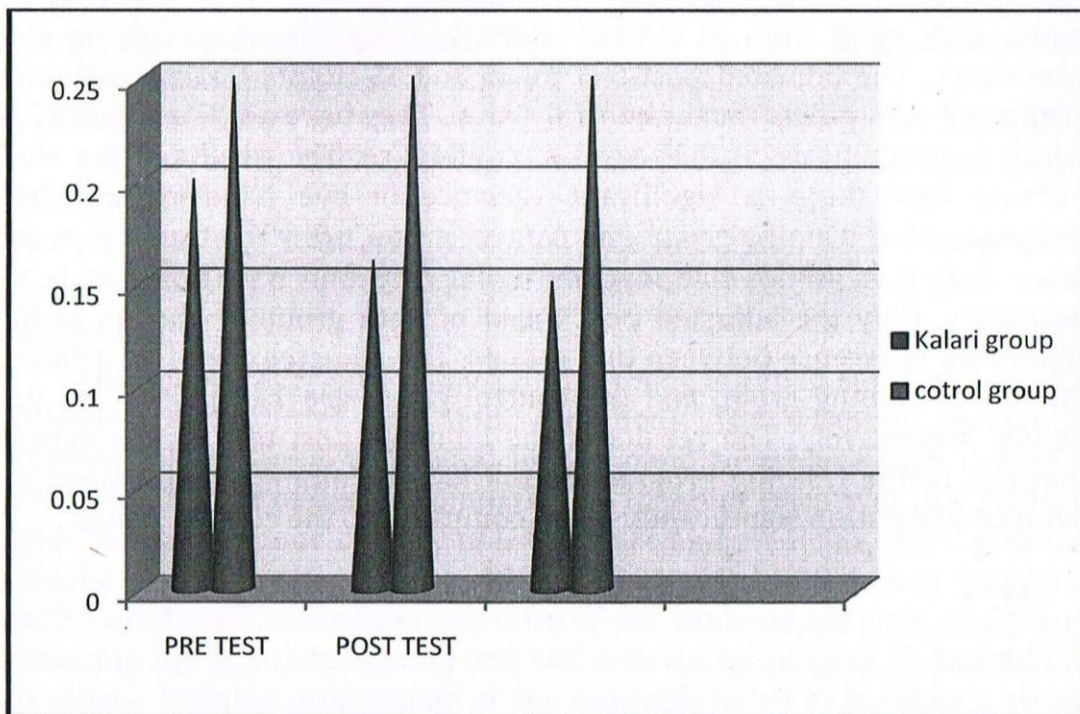


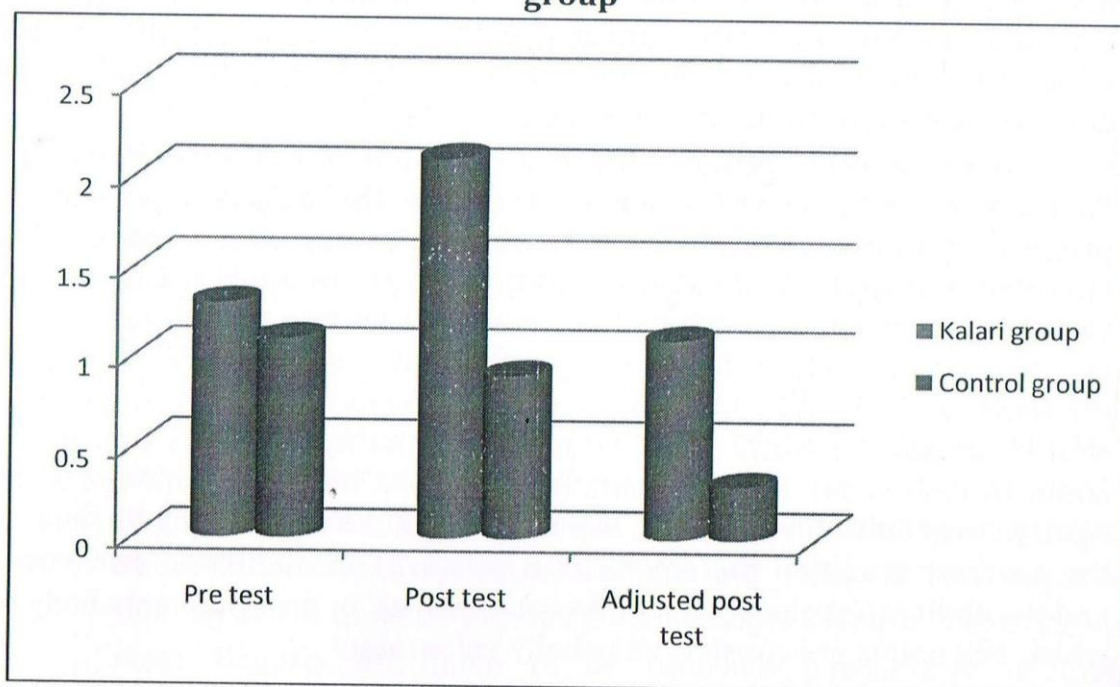
Table 3
Analysis of Covariance for the Data on Eye Hand Co-ordination of
Kalari and the Control group

Groups	Kalari Group	Control Group	Sources of variance	Sum of squares	df	Means squares	"F" ratio
Pre test	1.4	1.13	B:	-23.8	1	-23.8	-12.4
Mean±_Sd	±.67	.64	W:	53.67	28	1.92	
Post test	2.13	1	B:	-32	1	-32	-13.28
Mean ±SD	±.80	±.67	W:	67.37	28	2.41	
Adjusted	1.15	.33	B:	536.52	1	536.52	12.65*
Post test mean			W:	1145.15	27	42.41	

*F.05(1,28)=4.20, F(.05) (1,27)= 4.21

Table 3 shows that the pre-test means in eye hand co-ordination of kalari training group is 1.4 points, and that of control group is 1.13 points. Results in an F ratio of -12.4 indicate that statistically insignificant difference between the pre-test means is at 0.05 level of confidence. The post test means of kalari training group is 2.13 points and control group is 1 point, with an F ratio of -13.28, which is insignificant at 0.05 level of confidence. The adjusted post-test mean is 1.15 points for kalari training group and 0.33 points for the control group. They have an "F" ratio of 12.65 which is insignificant at 0.05 level of confidence. The results of the study indicate that there is significant variance in eye hand co-ordination between kalari training group and control group, after the training period. Since only two groups are involved using any one post hoc test is not necessary. Only the adjusted post mean of both group is enough to find significant difference between that groups. The adjusted post-test means of the kalari training group and the control group are 1.15 points and 0.33 points, respectively. The results of the adjusted post-test means indicate that due to the training programme the kalari training group gained eye hand co-ordination significantly when compared to the control group.

Details of Eye Hand Co-ordination of Kalari Group and the Control group



Results and Discussion:

- The results of the study reveal that the performance of kalari training group increased. They reveal that the arm strength has improved at the level of 124kg.
- As the results indicate the reaction time is significant at the level of 0.5 seconds. 0.03 seconds have improved on an average in one person.
- At last eye hand co-ordination also increased at the level of 11 points. On an average 0.73 points have increased in a person.

Conclusion:

The holistic approach of the kalari training is aimed at the ultimate co-ordination and control over mind and body. The weapons become an extension of the body, controlled by the mind to achieve high degree of perfection in both offensive combats. The inherent beauty of this art form lies in the harmonious synergy of art, science and medicine. Boys, girls and working professionals can reap the benefits of this rich and treasured martial art. In fact, more than one third of our students are girls. Apart from mastering the intricate fighting and self defense techniques, dedicated and systematic training programme at the academy helps in building a strong body and a focussed mind. Kalaripayattu is a focussed traditional psycho-

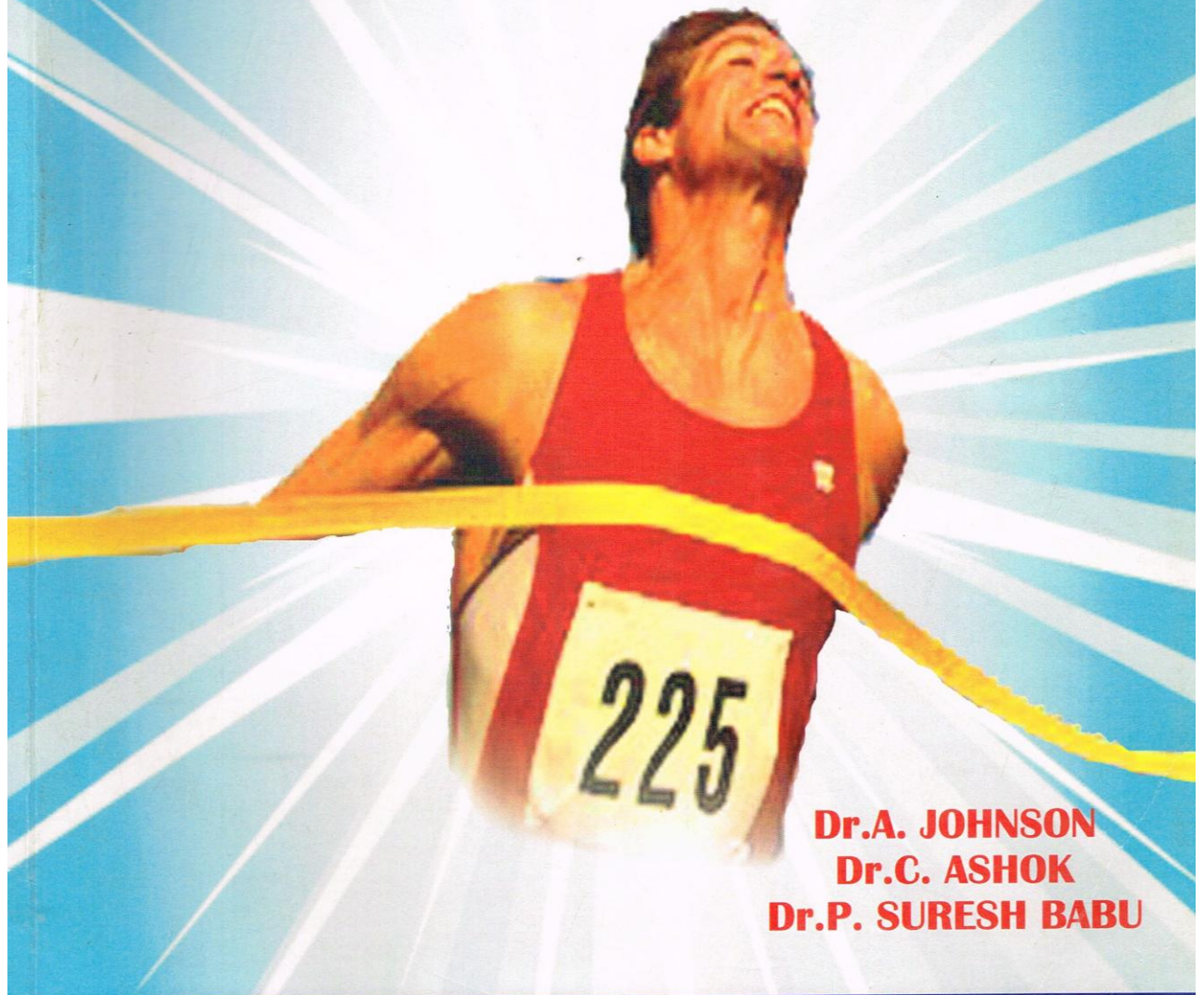
physiological discipline emanating from Kerala's unique mytho-historical heritage as well as a scientific system of physical culture training. The historical antecedents of this martial art form combines indigenous Dravidian systems of martial practice such as 'varma ati' or 'marma adi' with an influence of Aryan Brahman culture which migrated southwards down the west coast of India into Kerala.

There are two distinct traditions in kalari: the Northern and the Southern schools. In the Northern tradition the emphasis is laid on progressing from body exercises to combat with weapons and last of all to unarmed combat. In the Southern tradition the patron saint of kalari is the sage Agastya whose strength and powers of meditation are legendary. It is said that when the Lord Shiva married the Goddess Parvathi at Kailasa in the North, all gods and goddesses went to attend the wedding and with this shift in weight the world tilted, so much so, that Agastya was sent to the South to restore the balance. Lord Rama, legend has it, was mentored by Agastya to acquire the weapons, which defeated the demon king Ravana. In the southern tradition the emphasis is primarily on footwork, movement and the ability to strike at vital points or 'marmas' in the opponents body of which 108 points are considered lethally vulnerable.

Works Cited:

- [1] Green, Thomas A., ed. (2001). *Martial Arts of the World: An Encyclopedia*, ABC-CLIO. pp. 176-177. ISBN 9781576071502.
- [2] Luijendijk, D.H. (2005). *Kalaripayat: India's Ancient Martial Art*. Boulder: Paladin Press. ISBN 1-58160-480-7.
- [3] Zarrilli, Phillip B. (1998). *When the Body Becomes All Eyes: Paradigms, Discourses and Practises of Power in Kalaripayattu, a South Indian Martial art*. Oxford: Oxford University Press.
- [4] Sports Authority of India (1987). *Indigenous Games and Martial Arts of India*. New Delhi: Sports Authority of India. pp.91 & 94.

MODERN TRENDS IN SPORTS MANAGEMENT



**Dr.A. JOHNSON
Dr.C. ASHOK
Dr.P. SURESH BABU**



Department of Physical Education, Health Education and Sports
AYYA NADAR JANAKI AMMAL COLLEGE
(Autonomous, Nationally Re-Accredited with A+ Grade and College with Potential for Excellence)
SIVAKASI - 626126

MODERN TRENDS IN SPORTS MANAGEMENT

Editors : Dr.A. JOHNSON, Dr.C. ASHOK, Dr.P. SURESH BABU

First Impression : MARCH 2012

ISBN :



© AYYA NADAR JANAKI AMMAL COLLEGE, SIVAKASI
TAMILNADU, INDIA

No part of this publication may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owners.

DISCLAIMER

Content on this book is published by the editors and any query regarding this content please contact the corresponding author(s). Editors accept no liability for the content of this book, or for the consequences of any actions taken on the basis of the information provided, unless that information is subsequently confirmed in writing. Any views or opinions presented in this book are solely those of the author(s) and do not necessarily represent those of the Editors.

MSK Publications

2/189-E, Shanthi Nivas
Athanoor Amman Kovil Street
Masinayaganpatti (PO).
Ayyothiyapattinam, Salem – 636 103,
TAMIL NADU
Email: mskpubs@gmail.com

Design @ AKASH Computers, Thiruthangal

S.No.	TITLE	NAME OF THE AUTHOR(S)
C17	EFFECT OF AEROBIC CROSS TRAINING AND AEROBIC TRAINING ON EXPIRATORY RESERVE VOLUME	Mr. P. SIVAKUMAR, Dr. P. KULOTHUNGAN
C18	EFFECT OF PLYOMETRIC TRAINING ON EXPLOSIVE STRENGTH AMONG SCHOOL LEVEL SPRINTERS	K.M. MANIMEKALAI, Dr. S. CHITRA
C19	EFFECT OF CORE TRAINING ON SELECTED PHYSICAL AND SKILL RELATED PERFORMANCE VARIABLES OF FOOTBALL PLAYERS	S.BINTHU MATHAVAN, Dr. A. PRAVEEN
C20	EFFECTS OF VARIED INTENSITY SPEED TRAINING ON SELECTED SPEED PARAMETERS	M.MURUGAN, AND S.SHEBI
C21	IMPACT OF DIFFERENT INTENSITIES OF CIRCUIT TRAININGS ON SELECTED STRENGTH AND ENDURANCE PARAMETERS OF HANDBALL PLAYERS	T.MURUGESAN, Dr.R.ELANGO VAN, Dr.C.ASHOK
C22	EFFECT OF SAND DUNE RUNNING ON CARDIO RESPIRATORY ENDURANCE AND VITAL CAPACITY AMONG FOOTBALL PLAYERS	S.NEWTON, Dr. S.SENTHILVELAN
C23	EFFECT OF POWER AND SPEED TRAINING ON SELECTED BIOMOTOR VARIABLES OF WOMEN BADMINTON PLAYERS	Dr.M.PONNULINGHAM, N. ARUNA
C24	COMPARATIVE EFFECTS OF BALLISTIC AND PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION STRETCHING ON FLEXIBILITY AND POWER AMONG COLLEGE STUDENTS	Pon. SOLAI PANDIAN, Dr. A.S. NAGESWAREN Dr.S.BEVINSON PERINBARAJ
C25	EFFECT OF STEP AEROBICS TRAINING ON EXPLOSIVE POWER IN PHYSICAL EDUCATION STUDENTS	Mr. PRAMOD K.G
C26	EFFECT OF CIRCUIT TRAINING ON CARDIO REPIRATORY *ENDURANCE AMONG COLLEGE MEN	K.RAJA
C27	EFFECT OF PLYOMETRIC TRAINING ON SELECTED PHYCIAL FITNESS VARIABLES	Mr.U.RAMESKUMAR, Dr.V.JEYANTHI
C28	COMPARATIVE EFFECT DIFFERENT DANCE ON SELECTED STRENGTH VARIABLES AMONG POST PUBESCENT GIRLS	S.SABAA NANTH, Dr.V.GOPINATH
C29	INFLUENCE OF PLYOMETRIC TRAINING AND AEROBIC TRAINING ON ANAEROBIC POWER, AEROCIC POWER AMONG SOCCER PLAYERS	Mr. K. SAM MICHEAL, Dr. J.SATHIAH
C30	EFFECT OF CROSS TRAINING WITH GAME-SPECIFIC EXERCISES ON SELECTED PERFORMANCE VARIABLES AMONG FIELD HOCKEY PLAYERS	V. SAMINATHAN, Dr. C. ROBERT ALEXANDER
C31	EFFECTS OF COMBINED AEROBIC AND ANAEROBIC TRAINING IN DIFFERENT PROPORTIONS ON VO ₂ MAX AMONG HEALTHY COLLEGE MEN	Mr.M.SANKAR, Dr.V.GOPINATH
C32	EFFECT OF RESISTEANCE TRAINING AND CONSEQUENT DETRAINING OF DIFFERENT DURATIONS ON STRENGTH AND STRENGTH ENDURANCE AMONG YOUNG WOMEN	Mrs. G.SARAH SAROJINI Dr. M. SIVA SANKAR REDDY
C33	EFFECT OF CIRCUIT TRAINING ON SELECTED PHYSIOLOGICAL AND BIOCHEMICAL PARAMETERS AMONG COLLEGE WOMEN STUDENTS	D.SARANYA, Dr.R.GOPINATH
C34	EFFECT OF RESISTANCE, ENDURANCE TRAINING AND COMBINED TRAINING ON TIDAL VOLUME OF COLLEGE STUDENTS	Mr. M. SEENIMURUGAN Dr. V. JEYAVEERAPANDIAN
C35	EFFECT OF MOVING CIRCUIT TRAINING ON SELECTED MOTOR FITNESS VARIABLES	Mr.R. SEVI, Dr. P. KARTHIKEYAN
C36	INFLUENCE ON LEG STRENGTH DUE TO DIFFERENT INTENSITIES OF RESISTANCE TRAININGS	Dr.K.SIVAKUMAR

S.No.	TITLE	NAME OF THE AUTHOR(S)
C37	EFFECT OF STAIR RUNNING ON SPEED AND EXPLOSIVE STRENGTH	Mr. P. SIVARAMAN
C38	EFFECT OF INTERVAL CIRCUIT TRAINING ON MOTOR FITNESS AND VOLLEYBALL SKILL PERFORMANCE OF MALE VOLLEYBALL PLAYERS	A.SUBRADEEPAN
C39	EFFECT OF WEIGHT TRAINING ON MUSCULAR ENDURANCE OF PONDICHERRY UNIVERSITY STUDENTS	A.SURESH
C40	EFFECT OF INTRA-SESSION CONCURRENT RESISTANCE CIRCUIT TRAINING AND ENDURANCE TRAINING ON PHYSICAL FITNESS CHARACTERISTICS OF MALE FOOTBALL PLAYERS	S.SUTHAKAR, D.SELVAPANDIAN E.BALAJI, Dr.PUSHPARAJAN
C41	EFFECT OF CIRCUIT RESISTANCE TRAINING ON LEG STRENGTH	Mr. G. SWAMINATHAN Dr. P. KARTHIKEYAN
C42	EFFECT OF SILAMBAM TRAINING ON GRIP STRENGTH AND ARM STRENGTH, FOR HIGHER SECONDARY BOYS	M. SYEDALI Dr.P.KUMARESAN 183
C43	EFFECT OF SPECIFIC TRAINING PROGRAMME ON SPEED AGILITY EXPLOSIVE POWER AND ENDURANCE FOR VOLLEYBALL PLAYERS	J. THOMAS RAJA SELVAM Dr.P.KUMARESAN
C44	EFFECT OF PLYOMETRIC TRAINING ON SPEED ENDURANCE STRENGTH ENDURANCE AND AGILITY OF SEDENTARY COLLEGE MEN	Dr.K.RAJESHKUMAR, S.KARTHIKEYAN, S.PARIMALAM
C45	CHANGES IN CARDIO-RESPIRATORY ENDURANCE AND RESTING PULSE RATE AMONG MALE STUDENTS DUE TO FARTLEK TRAINING	Mr. S. VEERAMANI, Mr. G. RAJMOHAN
D	EXERCISE PHYSIOLOGY	Page 197 - 226
D1	EFFECT OF BRISK WALKING PROGRAMME ON SELECTED PHYSIOLOGICAL VARIABLES AMONG MIDDLE AGED MEN	ASHISH KUMAR SINGH, Dr. M. ELAYARAJA
D2	EFFECT OF AEROBIC EXERCISE ON SELECTED PHYSICAL AND BIOCHEMICAL PARAMETERS AMONG COLLEGE MEN STUDENTS	N.CHANDRAKUMAR, R.GOPINATH
D3	EFFECT OF AEROBIC EXERCISE ON SELECTED MOTOR FITNESS COMPONENTS ON ADOLESCENT BOYS	Dr. G. VASANTHI, G. DHANALAKSHMY
D4	INFLUENCE OF PLYOMETRIC TRAINING ON RESTING HEART RATE OF VOLLEYBALL PLAYERS	E. JENZER VINO, P. KUMARESAN
D5	RELATIONSHIP OF ARM LENGTH AND SHOULDER STRENGTH ON SPIKING ABILITY AMONG COLLEGE MALE VOLLEYBALL PLAYERS	Mr.G.RAJAMOCHAN, Mr.S.VEERAMANI
D6	ANALYSIS ON SELECTED MORPHOPHYSIOLOGICAL PARAMETERS OF RDT HOCKEY ACADEMY PLAYERS	G.P.RAJU, Dr.P.JOHNSON V.HYMAVATHI
D7	EFFECT OF LOW AND HIGH INTENSITY RELATIVE WEIGHT EXERCISE ON SELECTED PHYSICAL AND PHYSIOLOGICAL RESPONSES OF MALE ATHLETES	K.A. SHAHUL HAMEED, Dr. P. KUMARESAN
D8	ANALYSIS ON RESISTANCE TRAINING AND CONSEQUENT DETRAINING OF DIFFERENT DURATIONS ON STRENGTH AND STRENGTH ENDURANCE AMONG YOUNG WOMEN	Mrs. G.SARAH SAROJINI Dr. M. SIVA SANKAR REDDY
D9	EFFECT OF MEDICINE BALL EXERCISE ON FITNESS AND FLEXIBILITY OF SCHOOL BOYS	Mr. C. THILLAIGOVINDAN Mr. A. GUNALAN
D10	PHYSICAL AND PHYSIOLOGICAL INFLUENCES OF YOGIC PRACTICES ON COLLEGE LEVEL WOMEN VOLLEYBALLERS	Dr. S.VIJAYAKUMARI, C.ESTHER RAVI
E	SPORTS MEDICINE	Page 227 - 255
E1	EFFECT OF AEROBIC TRAINING ON SYSTOLIC AND DIASTOLIC BLOOD PRESSURE AMONG TYPE-2 DIABETIC PATIENTS	M. ESWARAKRISHNAN Dr. Y.WISE BLESSED SINGH

EFFECT OF SILAMBAM TRAINING ON GRIP STRENGTH AND ARM STRENGTH, FOR HIGHER SECONDARY BOYS

M. SYEDALI¹, Dr.P.KUMARESAN²

¹Director of Physical Education, Sadakathullah Appa College, Palayamkottai, Tirunelveli.

²Associate Professor, Dept. of Phy.Edn, Health Edn & Sports, The M.D.T Hindu College, Tirunelveli-10.

Introduction:

The origin of silambam stretches back into the dim and hoary part. The originator of this sport is yet unknown. The keeping with the tradition of Indian culture the origin of this art is traced to a divine source, namely lord muruga, as he is otherwise known of silambam an in Tamil. In the mythological background of Tamil civilization. In fact, this seems to have been the primary mode of fighting in the armies of the Sangam Kings. Already mentioned in the soldiers o Veerapandya Katta Bomman (1760 – 1866) A.D relied mainly on their skill in silambam in their skirmisher with the British army. There are so many steps in silambam they are foot work, it is used for bringing about shifts of our body weight to exert force in hicks and speed of movements. But speed and agility combined to be constantly moving around in a limited area. In the tamil language, this is called. Literally 'House building' or 'Fort' The next is staff work. The staff has mainly is about the grip. The basic grips is to held the staff at one end with the palm from the wrist to the second phelong of the index finger, the finger crossing over the staff. The left hand is placed above in such a way that the 'V' between the thumb and the index finger. In swings there are five types they are front swing, side-swing back swing overhead swing under arm and over arm swing. This swing is used to protect the opponent stick or we can cover our body fully. When we swing fastly the enemy stick cannot touch your body this is a defensive skills.

Methodology

To achieve the purpose of this study randomly selected 30 male subjects from 30 subjects were selected from Seyad Residential Matriculation Higher Secondary School, Courtrallam school students. Were randomly selected as subjects. Age of the subjects ranged from 16 to 19 years. The collected data were analyzed and applying statistical procedure of ANCOVA.

TABLE-I

ANALYSIS OF COVARIANCE FOR THE DATAON GRIP STRENGTH OF SILAMBAM AND THE CONTROL GROUP

Groups	Silambam Group	Control Group	Sources of Variance	Sum of Squares	df	Means Squares	" F " ratio
Pretest	29.87	26.87	B:	-120.26	1	12036.26	-26.51
Mean±SD	±5.45	5.23	W:	12714.23	28	454.08	
Post test	45	27.07	B:	-17458	1	-175458	-24.07
Mean± SD	±7.65	±5.58	W:	20306.47	28	725.23	
Adjusted	41.14	28.	B:	522.43	1	522.43	16.50*
Post test Mean			W:	855.09	27	31.66	

*F.05 (1.28) = 4.20, F(05) (1,27) = 4.21

Table III shows that the pre-test means in right hand grip strength of Silambam training group 29.87 kg, and that of control group 26.87 kg. Results in an F ratio of 26.51, which indicates that, statistically insignificant difference between the pre-test means at .05 level of confidence. The post test means of Silambam training group is 45 kg and that control groups 27.07 kg, with an F ratio of -24.07, which is insignificant at .05 level of confidence. The adjusted post-test mean 41.14 kg, for Silambam training group and 28.93 Kg. For the control group have an "F" ratio of 16.50*. Which is significant at .05 level of confidence.

TABLE-II
ANALYSIS OF COVARIANCE FOR THE DATA ON ARM STRENGTH OF SILAMBAM AND THE CONTROL GROUP

Groups	Silambam Group	Control Group	Sources of Variance	Sum of Squares	df	Means Squares	"F" ratio
Pretest Mean SD	26.13 4.39	14.13 3.05	B: W:	-4028 4579.39	1 28	-4028 454.08	-23.76
Post test Mean SD	38.27 6.35	13.93 3.29	B: W:	-5698.73 7555.93	1 28	-5698.73 269.85	21.12
Adjusted Post test Mean	24.48	16.96	B: W:	166.22 472.02	1 27	166.22 17.48	9.51*

*F.05 (1,28) = 4.20, F(.05) (1,27) = 4.21

EFFECT OF SPECIFIC TRAINING PROGRAMME ON SPEED AGILITY EXPLOSIVE POWER AND ENDURANCE FOR VOLLEYBALL PLAYERS

J. THOMAS RAJA SELVAM¹, Dr.P.KUMARESAN²

¹Director of Physical Education, G.U.Pope College, Sayarpuram

Associate Professor, Dept. of Physical Education, The M.D.T Hindu College, Tirunelveli

Introduction

Volleyball is an Olympic team sport in which two teams of 6 active players are separated by a net. Each team tries to score points by grounding a ball on the other team's court under organized rules. This article focuses on competitive indoor volleyball; numerous other variations of volleyball have developed, most notably the Olympic spin-off sport beach volleyball.

Play proceeds as follows: a player on one of the teams begins a rally by attempting to serve the ball (tossing or releasing it and then hitting it with a hand or arm), from behind the back boundary line of the court, over the net and into the receiving team's court. The receiving team must not let the ball touch their court; they may touch the ball as many as three times, typically using the first two touches to set up for an attack, an attempt to direct the ball back over the net in such a way that the serving team is unable to prevent it from touching their court. The rally continues in the same manner, with each team allowed as many as three consecutive touches, until either a team makes a skill, grounding the ball on the opponent's court, thus winning the rally; or a team commits a fault, thus losing the rally. The

team that wins the rally is awarded a point, and serves the ball to start the next rally. The complete rules are extensive; a few of the most common faults include:

Importance of Specific Training

To achieve higher than average performances, the body itself, the human organism has to undergo what amounts to a real transformation. In addition, it is necessary to master as thoroughly as possible the movements required for higher performances and to possess the mental, the spiritual qualities which will help us to utilize our powers most rationally economically and at the highest possible level.

STATEMENT OF THE PROBLEM

The purpose of the study was determining the effect of specific training program on speed, agility, explosive power and endurance for volleyball players.

HYPOTHESIS

It was hypothesized that the specific training would show significant increase in speed, agility, explosive power, and endurance.

METHODOLOGY

To achieve the purpose of the study thirty subjects were selected from intercollegiate volleyball players in m.s university at tirunelveli. Only male players are selected for this study and their age ranged from 18 to 24 years. The variables are speed, agility, explosive power, and endurance. ANCOVA was used as statistical technique.

SELECTION OF VARIABLES

Speed	-	50 Meters dash
Agility	-	Shuttle run
Explosive Power	-	Vertical Jump (Standing)
Endurance	-	Cooper's 12 Min run/Walk test

ANALYSIS OF THE DATA

The statistical analysis of data collection on selected variables has been presented in this chapter. The data pertaining to speed, agility, explosive power and endurance for both experimental and control groups were tested by ANCOVA. The level of significant was fixed at 0.05 level.

DIFFERENCE IN MEAN OF EXPERIMENTAL AND CONTROL GROUP IN 50 METER DASH MEANS IN SECONDS

GROUPS	NO S	INITIAL MEAN	FINAL MEAN	MEAN DIFFERENCE	STANDARD DEVIATION	STANDARD ERROR OF MEAN DIFFERENCE	'T' RATIO
EXPERIMENTAL	15	7.3433	7.1700	0.11568	0.11568	0.02987	5.830*
CONTROL	15	7.4140	7.3827	0.03133	0.13416	0.03464	0.905

*significant at 0,05level of confidence.

The initial and the final mean for the experimental group were 7.3433 and 7.1700, and for the control group was 7.4140 and 7.3827 respectively. The calculated 't' value for the experimental group was 5.803 which was higher than the table value at 0.05 level. In the case of control group the calculated value for 't' ratio was 0.905 which was lower than the table value. This indicates that there was a significant difference in the experimental group following training for a period of six weeks.

DIFFERENCE IN MEAN OF EXPERIMENTAL AND CONTROL GROUP IN AGILITY (SHUTTLE RUN)

GROUPS	NOS	INITIAL MEAN	FINAL MEAN	MEAN DIFFERENCE	STANDARD DEVIATION	STANDARD ERROR OF MEAN DIFFERENCE	'T' RATIO
EXPERIMENTAL	15	7.4731	7.1819	0.29125	0.14127	0.03532	8.246*
CONTROL	15	7.8619	7.9356	0.07375	0.14930	0.03733	-1.976

* significant at 0,05level of confidence

The initial and the final mean for the experimental group was 7.4731 and 7.1819, and for the control group was 7.8619 and 7.9356 respectively. The calculated 't' value for the experimental group was 8.246 which was higher than the table value at 0.05 level. In the case of control group the calculated value for 't' ratio was 1.976 which was lower than the table value. This indicates that there was a significant difference in the experimental group following a training for a period of six weeks.

DIFFERENCE IN MEAN OF EXPERIMENTAL AND CONTROL GROUP IN EXPLOSIVE POWER VERTICAL JUMP MEANS IN CENTIMETERS

GROUPS	NOS	INITIAL MEAN	FINAL MEAN	MEAN DIFFERENCE	STANDARD DEVIATION	STANDARD ERROR OF MEAN DIFFERENCE	'T' RATIO
EXPERIMENTAL	15	0.8201	0.8493	-0.02867	0.01187	0.00307	9.352*
CONTROL	15	0.7540	0.7693	-0.01533	0.02800	0.00723	-2.121

* significant at 0,05level of confidence

The initial and the final mean for the experimental group was 0.8201 and 0.8493, and for the control was 0.7540 and 0.7693 respectively. The calculated 't' value for the experimental group was 3.352 which was higher than the table value at 0.05 level. In the case of control group the calculated value for 't' ratio was 2.121 which was lower than the table value. This indicates that there was a significant difference in the experimental group following a training for a period of six weeks.

**DIFFERENCE IN MEAN OF EXPERIMENTAL AND CONTROL GROUP IN
COOPERS 12 MINUTE RUN/WALK TEST METER DASH IN METERS**

GROUPS	NOS	INITIAL MEAN	FINAL MEAN	MEAN DIFFERENCE	STANDARD DEVIATION	STANDARD ERROR OF MEAN DIFFERENCE	'T' RATIO
EXPERIMENTAL	15	2417.6000	2528.4667	-110.86667	69.98354	18.06967	6.136*
CONTROL	15	2231.4000	2236.7333	-5.33333	35.71248	9.22092	-0.578

* significant at 0,05level of confidence

The initial and the final mean for the experimental group was 2417.6000 and 2528.4667, and for the control group was 2231.4000 and 2236.7333 respectively. The calculated 't' value for the experimental group was 6.136 which was higher than the table value at 0.05 level. In the case of control group the calculated value for 't' ratio was 0.578 which was lower than the table value. This indicates that there was a significant difference in the experimental group following a training for a period of six weeks.

CONCLUSIONS

Participation in six weeks of specific volleyball training programme resulted in improvement on speed, agility, explosive power and endurance capacities.

References

1. Reily.T, Science and Volleyball (Chapmenhall:London,Aroki Publication,1996):64
2. Gabbet T and Georgieff B "Physiological and anthropometric characteristics of Australian junior national,state,and novice volleyball players" Journal of Strength Conditional Research.21(3),(August 2007)902-8
3. Anderson S et., "Changes in skill and physical fitness following training in talent-volleyball players" Journal of strength Conditional Research.20(1),(February 2006) 29-35..
4. Melrose DR et, al., "Physiological and performance characteristics of adolescent club volleyball players" Journal of Strength Conditional Research.21(2),(May 2007),481-6
5. Duncan MJ et, al., "Anthropometric and physiological characteristics of junior elite volleyball players" Journal of sports medicine.40(7),(July 2006),651



**PROMOTION OF YOGA,
HEALTH AWARENESS
AND PHYSICAL FITNESS**

- A MULTI DIMENSIONAL APPROACH



Dr. D. JIM REEVES SILENT NIGHT

**ADITANAR COLLEGE OF ARTS AND SCIENCE,
VEERAPANDIANPATNAM - 628 216 TIRUCHENDUR**

Paper No.	Title of the Paper and Author(s)	Page No
87	Web Resources in Physical Education and Sports D. Seenivasan & A. Lingeswari	218
88	Physical Fitness for Disabled <i>Prashanth. A. P. & I Masanamuthu</i>	220
89	Effect of Plyometric Training on Horizontal Explosive Power and Vertical Explosive Power among Intercollegiate Volleyball Players D. Abraham Samson & E. Revathi	223
90	Reflections on the Professionalism of Coaches and Effective Communication S. Shynu & Pattavarayan	225
91	Physical Fitness of Children Obesity Mr.R.Sugumaran & Mr.Soundararajan	227
92	Effect of Plyometrics Training on Horizontal Explosive Power and Speed among Inter Collegiate Handball Players Mr.M. Sivakumar & Mr.V. Rajasekar	229
93	Effect of Continuous Running Training on Selected Physiological Variables of Hand Ball Players <i>Mr. P.Sivaraman</i>	231
94	Personality Traits and Emotional Intelligence of Former International High Jumper Nallusamy Annavi Dr. K.Rajendran	233
95	A Pilot Study of Yoga for Persistent Fatigue in Breast Cancer Survivors M.Syed Ali & Dr.P.Kumaresan	236
96	Effect of stair climbing on leg strength of Football players Dr. G. Santhoshkumar	238
97	Effective Literature Management by using Mendeley Software <i>G.Vigneshwaran & Dr. B. Jeyapragash</i>	240

A PILOT STUDY OF YOGA FOR PERSISTENT FATIGUE IN BREAST CANCER SURVIVORS

M.Syed Ali, Assistant Director of Physical Education, SadakathullahAppa College Dr.P.Kumaresan,
Associate Professor, Dept.ofPhy.Edu,HealthEdu& Sports, The M.D.T Hindu College.

INTRODUCTION

Breast cancer is the most common cancer diagnosed in females, with over 252,150 new cases expected in the United States in 2008. With advances in detection and treatment, the number of women who survive breast cancer has increased significantly in recent years. Five-year survival rates for localized breast cancer have climbed to 98%, resulting in an estimated 2.6 million North American women living in the aftermath of breast cancer. As survival times increase, addressing the impact of breast cancer and its treatment on long-term outcomes have become increasingly important. In particular, better understanding and management of cancer-related symptoms is critical for reducing suffering in cancer survivors, as highlighted by a recent State of the Science conference sponsored by the National Institutes of Health. Fatigue is the most common and disabling symptom among women successfully treated for breast cancer. Fatigue is elevated during cancer treatment and persists beyond treatment completion in a substantial minority of women, with approximately 30% of breast cancer survivors reporting moderate to severe symptoms of fatigue one or more years post-treatment. Cancer-related fatigue has been described by patients as a “different type of fatigue” as it is pervasive, debilitating, and not relieved by rest, and involves physical, mental, and emotional exhaustion. Fatigue has a negative impact on work, social relationships, and daily activities and causes significant impairment in overall quality of life among breast cancer survivors. In longitudinal assessments of breast cancer survivors, we have found considerable stability in fatigue levels over time. For example, fatigue scores at 1–5 years post-diagnosis were highly correlated with fatigue scores at 5–10 years post-diagnosis in a longitudinal study of breast cancer survivors. These findings suggest that persistent fatigue may not remediate without targeted treatment. Despite the prevalence of cancer-related fatigue, few evidence-based interventions are currently available to manage this symptom. There is growing evidence that behavioral interventions may be effective in reducing fatigue among cancer patients undergoing treatment. For example, exercise interventions have shown positive effects on fatigue during treatment, as have psychosocial interventions that include stress management and relaxation techniques. Cancer survivors with persistent fatigue may be unwilling or unable to participate in standard exercise interventions, such as walking or cycling; indeed, recent evidence suggests that fatigue is one of the primary barriers to participation in exercise programs among cancer survivors.

METHODS

Breast cancer survivors with persistent fatigue were recruited through newspaper advertisements and flyers distributed in local oncology clinics. Fatigue was assessed with the vitality subscale of the SF-36, a reliable and valid 4-item scale that assesses how much of the time respondents feel “worn out”, “tired”, have “a lot of energy”, and feel “full of pep” over the past 4 weeks. Scores on this scale range from 0–100, with scores below 50 indicating disability or limitations related to fatigue. Women who scored at or below 50 on this scale at both a phone and an in-person screen (conducted an average of 4 months apart) were eligible for study participation. In previous research, we have shown that breast cancer survivors scoring below 50 on the SF-36 show alterations in psychosocial, immune, and neuroendocrine function, supporting the validity of this cut-point. Other eligibility criteria included (1) 45–65 years old, (2) originally diagnosed with Stage 0–II breast cancer, (3) completed local and/or adjuvant cancer therapy (with the exception of hormonal therapy), (4) no breast cancer recurrence, (5) no chronic medical conditions or physical contraindications to the specific yoga sequences being taught, (e.g., immune-related disease, diabetes, neurological disease, uncontrolled depression, uncontrolled high blood pressure, BMI > 30, active respiratory problems or asthma, and

moderate to severe neck, back, knee, or shoulder problems) (6) no current yoga practice (i.e., had not taken yoga classes regularly in past year), (7) nonsmoker, and (8) able to attend the scheduled classes. These criteria were designed to control for potential confounds that might influence fatigue levels and to ensure participant safety.

RESULTS

One of the main goals of this pilot study was to evaluate the acceptability of an Iyengar yoga intervention for breast cancer survivors with persistent fatigue. Of the 12 women enrolled in the trial, 11 completed the full 12-week course of treatment, supporting the acceptability of the intervention. The average number of classes attended was 22.4 (93% of classes offered; range = 19–24 classes attended); reasons for missing class included illness, vacation, and travel. At interviews conducted after treatment, all participants reported that the intervention was beneficial, that they planned to continue with yoga, and would recommend the intervention to other fatigued cancer survivors. At the 3-month post-intervention follow-up, all but one participant reported that they were continuing to take yoga classes, and all but one (the one who had not continued with yoga) reported that they had experienced enduring benefits from the intervention.

CONCLUSIONS

Results from this small, uncontrolled pilot study support the feasibility and acceptability of a tailored Iyengar yoga intervention for breast cancer survivors with persistent fatigue. Although the women had minimal prior yoga experience, they were enthusiastic about the classes and adherence was excellent; indeed, almost all participants reported that they continued taking yoga classes after the 12-week intervention was completed, and many had purchased props so that they could perform postures at home. Moreover, they were willing to attempt all of the postures and reported no adverse effects. We speculate that the careful selection of postures that would be appropriate for this patient population, the sequencing of postures from mild to more challenging over the course of the intervention, the in-depth screening of study participants and careful supervision throughout the trial, and instruction by an experienced teacher all contributed to treatment feasibility and acceptability. Results also provide preliminary support for the efficacy of this intervention in reducing symptoms of fatigue. Scores on each of the fatigue measures showed a significant improvement from pre- to post-intervention; for example, scores on the “average fatigue” item of the FSI fell from 6.3 to below 3, the cut-off for clinically significant fatigue, and scores on the SF-36 vitality scale increased by 22.7 points, a clinically significant change. Further, improvements were maintained at the 3-month post-intervention follow-up. This can be contrasted with effects seen in research on exercise interventions for cancer survivors, which have typically shown weaker effects on subjective fatigue. These findings are particularly encouraging given that study participants had experienced fatigue for several years before trial onset (mean number of years since diagnosis = 4.6; range = 10 months–15 years). Of note, participants continued to score below population norms on the SF-36 vitality scale (60.6 for women aged 45–54) at both post-treatment assessments, suggesting that a longer intervention may be required to further increase energy levels among women who have suffered from fatigue for many years.

REFERENCES

1. Department of Psychology, UCLA, Los Angeles, CA 90095, USA
2. Department of Psychiatry and Biobehavioral Sciences, Geffen School of Medicine, UCLA, Los Angeles, CA 90095, USA
3. Cousins Center for Psychoneuroimmunology, Semel Institute, UCLA, Los Angeles, CA 90095, USA
4. Division of Cancer Prevention and Control Research, Jonsson Comprehensive Cancer Center, UCLA, Los Angeles, CA 90095, USA
5. Pediatric Pain Program, Mattel Children's Hospital, UCLA, Los Angeles, CA 90095, USA



About the Editor

Dr. D. Jim Reeves Silent Night is working as Director of Physical Education, for the past 17 years, in Aditanar College of Arts and Science, Tiruchendur, Tamilnadu. Previously he worked as Lecturer in Physical Education at Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur. After his B.Sc., Chemistry at St. John's College, Palayamkottai, he did M.P.Ed., at Alagappa University College of Physical Education, Alagappa University, Karaikudi, and M.Phil., in Physical Education at Annamalai University, Chidambaram. He did his NIS certificate course in Coaching Hockey at Bangalore in the year 1995. Thereafter he completed his Ph.D., in Alagappa University, Karaikudi in the year 2004. He is an approved research guide in the field of Physical Education and Sports at Manonmaniam Sundaranar University, Tirunelveli and is guiding Ph.D., Scholars. Already four scholars have submitted their Ph.D., thesis and three of them have been awarded their Ph.D., degrees. Eight M.Phil., scholars have completed their degree under his supervision. He has published 22 research articles in reputed journals and has presented 27 research papers in national and international seminars / conferences.

Aditanar College of Arts and Science

Veerapandianpatnam 628216,

Tiruchendur, Tamilnadu.

Ph: 04693 242232, Fax 04639 245247

Email aditanarcollege@yahoo.co.in

B-DIGEST Publications

18/7, Devasahayam Street,

Nagercoil - 629 001

www.bdigest.in

Mob: 94888 88400



Printed by  Sivakasi 9865966146



Ramakrishna Mission Vivekananda University

Faculty of General & Adapted Physical Education and Yoga

SRKV Post, Coimbatore – 641 020

Certificate

With our congratulations, this is to certify

that *Dr. / Mr. / Ms.* M. SYED ALI Ph.d Scholar Cum

Director of Physical Education, Sadakathulla

Appa College, Tirunelveli - 11 participated in the

State Level Workshop on Archery, Carrom, Chess, Taekwondo and

Jennikoit organised by Ramakrishna Mission Vivekananda University Faculty

of General & Adapted Physical Education and Yoga, on 15th & 16th

September, 2015.

Dr. S. Alagesan

Professor & Head, GAPEY, RKMVU

Dr. M. Srinivasan

Organising Secretary

You will be nearer to Heaven through Football than through the study of the Gita, you will understand the Gita better with your biceps, your muscles, a little stronger.

- Swami Vivekananda



ALAGAPPA UNIVERSITY

(A Tamilnadu State University Reaccredited with 'A' Grade by NAAC)

FACULTY OF EDUCATION

Karaikudi



International Conference
On

HEALTH INDICATORS FOR PHYSICAL AND COGNITIVE FITNESS EDUCATION

Certificate

This is to certify that Mr/Ms/Mrs/Dr *M. Syed Ali* has participated / presented a paper in the **International Conference on Health Indicators for Physical and Cognitive Fitness Education** organized by the Faculty of Education, Alagappa University, Karaikudi, Tamilnadu on 26th & 27th February 2016, held at L.C.T.L. Palaniappa Chettiar Memorial Auditorium. Title of the Paper *Effect of Martial Art training on motor fitness variables for Higher Secondary School level Silambam players*.....

[Signature]
Prof. K. BALASUBRAMANIAN
Co-ordinator

[Signature]
Prof. P. SIVAKUMAR
Convener

[Signature]
Prof. V. BALACHANDRAN
Registrar i/c

University Grants Commission Sponsored

National Seminar on

**PROMOTION OF YOGA, HEALTH AWARENESS AND PHYSICAL FITNESS
- A MULTI DIMENSIONAL APPROACH**



Organized by

**Department of Physical Education
Aditanar College of Arts and Science**

Accredited (2nd Cycle) with 'A' Grade

Veerapandianpatnam 628 216, Tiruchendur, Tamilnadu, India.

In Collaboration with Vivekanandha Kendra, Kanniyakumari



ज्ञान - विज्ञानं विमुक्तये

CERTIFICATE

This is to certify that Dr./Ms./Mr. *M. Syed Ali, Assit. Director of Phy Edu.*

Sadakatullah, Appa College, Rahrath, Nagar - II

has participated in the **UGC Sponsored National Seminar on "Promotion of Yoga, Health Awareness and Physical Fitness - A Multi Dimensional Approach"** held at Aditanar College of Arts and Science, Tiruchendur during

30th Sep & 1st Oct 2014, and presented a paper on *A Pilot Study of Yoga for Persistent*

Fatigue in Breast Cancer Survivors.


Dr. D. Jim Reeves Silent Night
Organising Secretary


Dr. V. Gopalakrishnan
Principal

AYYA NADAR JANAKI AMMAL COLLEGE, SIVAKASI.

(Autonomous, Affiliated to Madurai Kamaraj University & Recognised by UGC as College with Potential for Excellence)



UGC SPONSORED NATIONAL SEMINAR ON MODERN TRENDS IN SPORTS MANAGEMENT

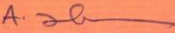
In collaboration with Virudhunagar District Football Association

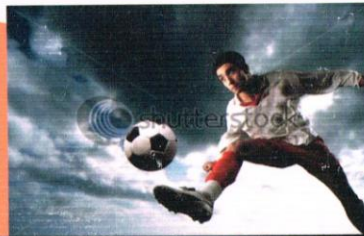



CERTIFICATE

This is to certify that M. SYED ALI, Ph.D. Scholar,
DIRECTOR OF PHYSICAL EDUCATION, SADAKATHULLAH APPA COLLEGE, TVL has
participated / presented a paper entitled EFFECT OF SILAMBAM TRAINING ON
GRIP STRENGTH AND ARM STRENGTH, FOR HIGHER SECONDARY BOYS

_____ in the UGC
sponsored "**National Seminar on Modern Trends In Sports Management**" organised by the
Department of Physical Education, Health Education and Sports, Ayya Nadar Janaki Ammal
College, Sivakasi, TamilNadu on 21st and 22nd March 2012.


Dr. A. JOHNSON
Organising Secretary




Dr. S. BASKARAN
Principal



ज्ञान-विज्ञान विमुक्तये

ARUMUGAM PILLAI SEETHAI AMMAL COLLEGE

(Re - accredited with 'B' Grade by NAAC)

DEPARTMENT OF PHYSICAL EDUCATION

THIRUPATHUR

Sivagangai District, Tamilnadu, South India.



UGC SPONSORED NATIONAL SEMINAR ON RECENT TRENDS IN SPORTS TECHNOLOGY, MANAGEMENT AND ALLIED SCIENCES

CERTIFICATE

This is to certify that M. Syed Ali of
Sadakathullah Appa College, Turuncveli
 has participated/presented a paper titled Effective management of Instrumentation and infra-structure facility of sports and games
 in the **UGC Sponsored National Seminar on "Recent Trends in Sports Technology, Management and Allied Sciences"**
 from 12th to 13th, September, 2014 organized by Department of Physical Education, Arumugam Pillai Seethai Ammal College,
 Thirupathur - 630 211 in collaboration with Sivagangai District Kabaddi Association.


Dr. S. JAYAVEL
 Organizing Secretary


Dr. V. S. A. SUBRAMANIAN
 Principal



Sadakathullah Appa College

(AUTONOMOUS)

(Reaccredited by NACC with 'A' Grade and ISO 9001:2008 Certified Institution)

Rahmath Nagar, Tirunelveli-627011.

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

UGC sponsored one-day National Level Workshop on
"ACCESS TO E-RESOURCES THROUGH NLIST AND OTHER SOURCES"

CERTIFICATE

This is to certify that Dr./Mr./Ms. SYED ALI, M. ASST DIRECTOR

of DEPT OF PHYSICAL EDUCATION, SADAKATHULLAH APPA COLLEGE, TIRUNELVELI.

has participated in the UGC sponsored one-day National Level Workshop on

"ACCESS TO E-RESOURCES THROUGH NLIST AND OTHER SOURCES" held on 10th January 2014.

R.R. Saravanakumar
Dr.R.R.Saravanakumar
Organizing Secretary

Dr.M.Mohamed Sathik
Dr.M.Mohamed Sathik
Principal



CERTIFICATE



Sadakathullah Appa College (Autonomous)

(Reaccredited with an 'A' Grade by NAAC - An ISO 9001:2008 Certified Institution)

Rahmath Nagar, Tirunelveli - 627 011.

CERTIFICATE OF PARTICIPATION

This is to certify that Mr./Ms./Dr./ M. SYED ALI

..... PHYSICAL EDUCATION, attended a Two-Day

Workshop on "EMPOWERING TEACHERS TO EMPOWER STUDENTS"

held on 23rd & 24th October, 2015 organized by the Internal Quality Assurance Cell.



V. Arul Dev
Resource Person



Dr. A. Abdul Kader
Director (Unaided Courses)



Dr. M. Mohamed Sathik
Principal



SILAMBAM: INDIA'S ANCIENT MARTIAL ART

Dr. P. Kumaresan¹ & M. Syed Ali²

¹Associate Professor, Department of Physical Education, Health Education & Sports, The M.D.T. Hindu College, Pettai, Tirunelveli, Tamilnadu, India.

²Ph.D., Research Scholar, Department of Physical Education, Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India.

Abstract

The purpose of the study is to find out the influence of silambam on grip strength of school students. Grip strength: Grip dynamometer of the rectangular type was used to measure grip strength, both right and left hand tested. The collected data from the two groups prior to and after experimentation on selected variables were statistically examined for significant difference, if any applying the analysis of ANCOVA. This is enough to find significant difference between selected groups. So need not use any one of the post hoc test, to determine which the paired means difference was significant. In all the cases to test the significant, 0.05 level of confidence was utilized. The result of the study reveals that the silambam training group increased in performance of right hand grip strength and left hand grip strength.

Keywords: Martial Art, Silambam, Fitness.

INTRODUCTION

Martial arts are great as spectator sports and a good way to get fit, but they really come into their own when they are used in self-defense – undoubtedly the ultimate result for many of them. The earliest evidence for specifics of martial arts as practiced in the past comes from depictions of fights, both in figurative art and in early literature, besides analysis of archaeological evidence, especially of weaponry. The oldest work of art depicting scenes of battle, dating back 3400 BC, was the Ancient Egyptian paintings showing some form of struggle. In Vietnam, drawings and sketches from 2879 BC describe certain ways of combat using sword, stick, bow, and spears. A number of South Asian fighting styles remain closely connected to yoga, dance and performing arts. Some of the choreographed sparring in silambam can be applied to dancers who knew silambam were believed to be markedly better than other performers. Until recent decades, the “chhau” dance was performed only by martial artists. Some traditional Indian classical dance schools still incorporate martial arts as part of their exercise regimen. Written evidence of martial arts in Southern India dates back to the Sangam literature of about the 2nd century BC to the 2nd century AD. The Akananuru and Purananuru describe the use of spears, swords, shields, bows and silambam in the Sangam era. This referred to the *silambam* staff which was in great demand with foreign visitors. Some traditional Indian classical dance schools still incorporate martial arts as part of their exercise regimen.

Silambam is a weapon-based Dravidian martial art from Tamil Nadu. In Tamil, the word silambam refers

to the bamboo staff which is the main weapon used in this style. Other weapons are also used such as the maduvu (deer horn), kathi (knife), vaal (sword), stick (kali or kaji), dagger (kuttuval), knuckle duster (kuttu katai), and whips with several flexible and metallic blades (surul pattai). Unarmed silambam, called kuttu varisai, utilizes stances and routines based on animal movements such as the snake, tiger, elephant and eagle forms. There are numerous sub-sects in silambam like nagam-16 (cobra-16), kallapathu (thieves ten), kidamuttu (goat head butting), kuravanchi, kalyanavarisai (similar to quarterstaff), thulukkanam, and so on. Each is unique and may differ from one another in grip, posture, foot work, method of attack, length of the stick, movement of the stick etc. Separate practice is needed for staffs of different lengths. Beginners are taught footwork (kaaladi) which they must master before learning spinning techniques and patterns, and methods to change the spins without stopping the motion of the stick. There are sixteen of them among which four are very important. Footwork patterns are the key aspects of silambam and kuttu varisai (empty hands form). Traditionally, the masters first teach kaaladi for a long time before proceeding to kuttu varisai. Training in kuttu varisai allows the practitioner to get a feel of silambam stick movements using their bare hands, that is, fighters have a preliminary training with bare hands before going to the stick. Gradually, fighters study footwork to move precisely in conjunction with the stick movements. The ultimate goal of the training is to defend against multiple armed opponents. In silambam as well as kuttu varisai, kaaladi is the key in deriving power for the blows. It

teaches how to advance and retreat, to get in range of the opponent without lowering one's defence, aids in hitting and blocking, and it strengthens the body immensely enabling the person to receive non-lethal blows and still continue the battle. The whole body is used to create power. In this study it implies the specificity principle regarding the present stretch condition of the muscle prior to explosive contraction. Millions of athletes are practicing games and sports regularly often these young athletes are disadvantaged. So in this study, silambam training selected as independent variable to test the improvement of selected criterion variables of 16 and 19 years old students.

METHODOLOGY

The purpose of the study is to find out the influence of silambam on grip strength of school students. Grip strength: Grip dynamometer of the rectangular type was used to measure grip strength, both

right and left hand tested. The collected data from the two groups prior to and after experimentation on selected variables were statistically examined for significant difference, if any applying the analysis of ANCOVA. This is enough to find significant difference between selected groups. So need not use any one of the post hoc test, to determine which the paired means difference was significant. In all the cases to test the significant, 0.05 level of confidence was utilized.

STATISTICAL ANALYSIS

The analyses of variance ANOVA test was performed to investigate the comparisons between the control and experimental group involved in silambam among school students. The level of significance was set at $p < 0.05$ and all data are presented as Mean and SD. The test-retest reliability was obtained through the Intra-class Correlation Coefficient (ICC). The SPSS 20 Software was adopted for this analysis.

TABLE I.
ANALYSIS OF COVARIANCE FOR THE DATA ON RIGHT HAND GRIP STRENGTH OF SILAMBAM AND THE CONTROL GROUP

Groups	Silambam group	Control group	Sources of variance	Sum of squares	df	Means squares	"F" ratio
Pre test	49.24	50.01	B:	120.26	1	120.26	0.26
Mean±Sd	3.45	3.23	W:	12714.23	28	454.08	
Post test	56.21	50.11	B:	574.58	1	574.58	12.31*
Mean ± SD	3.65	2.58	W:	1306.47	28	46.65	
Adjusted	56.20	50.07	B:	522.43	1	522.43	16.50*
Post test mean			W:	855.09	27	31.66	

* $F_{0.05}(1,28)=4.20$, $F_{0.05}(1, 27)= 4.21$

The above table-I indicates the adjusted mean value of right hand grip strength of experimental and control groups were 56.20 and 50.07 respectively. The obtained F-ratio of stress 16.50 was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant

difference among experimental and control groups on right hand grip strength. The above table also indicates that both pre and post test means of experimental and control groups differ significantly. The pre, post and adjusted mean values of right hand grip strength of both experimental and control groups are graphically represented in the Figure-I.

FIGURE I.
RIGHT HAND GRIP STRENGTH OF SILAMBAM GROUP AND THE CONTROL GROUP

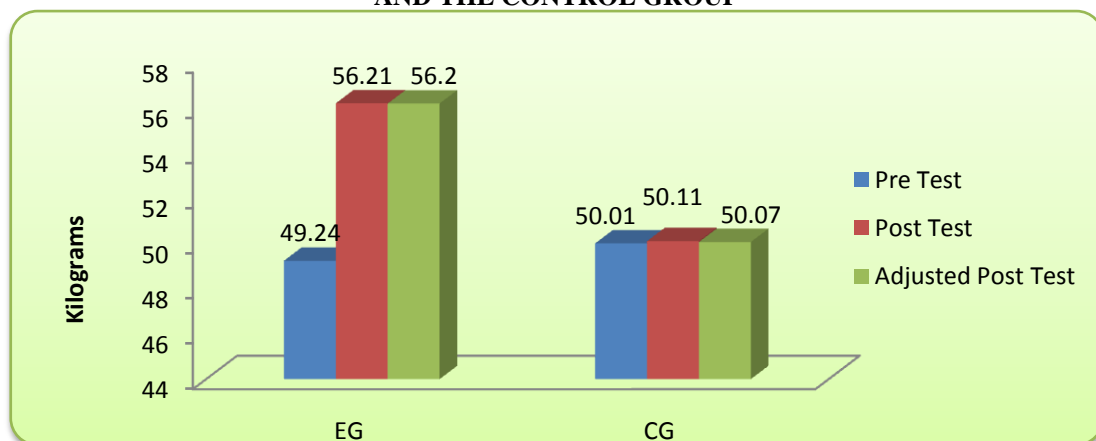


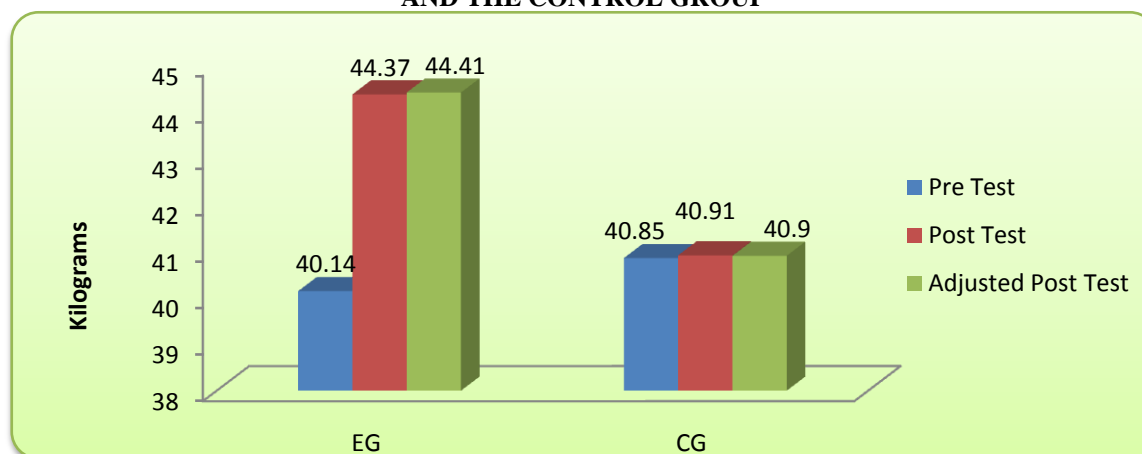
TABLE II.
ANALYSIS OF COVARIANCE FOR THE DATA ON LEFT HAND GRIP STRENGTH OF SILAMBAM AND THE CONTROL GROUP

Groups	Silambam group	Control group	Sources of variance	Sum of squares	df	Means squares	"F" ratio
Pre test	40.14	40.85	B:	974.73	1	974.73	2.16
Mean±Sd	2.39	2.75	W:	12627.33	28	450.97	
Post test	44.37	40.91	B:	1755.46	1	1755.46	5.11*
Mean ± SD	3.35	3.11	W:	9604.27	28	343.00	
Adjusted	44.41	40.90	B:	602.81	1	602.81	13.80*
Post test mean			W:	1214.8	27	44.99	

*F.05(1.28)=4.20, F(.05) (1, 27)= 4.21

The above table-II indicates the adjusted mean value of left hand grip strength of experimental and control groups were 56.20 and 50.07 respectively. The obtained F-ratio of stress 16.50 was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on left hand grip strength. The above table also indicates that both pre and post test means of experimental and control groups differ significantly. The pre, post and adjusted mean values of left hand grip strength of both experimental and control groups are graphically represented in the Figure-II.

FIGURE II.
LEFT HAND GRIP STRENGTH OF SILAMBAM GROUP AND THE CONTROL GROUP



CONCLUSION

The result of the study reveals that the silambam training group increased in performance of right hand grip strength and left hand grip strength.

REFERENCES

1. Master Murugan, Chillayah (20 October 2012). "Silambam Fencing and play variation". Silambam. Retrieved 31 May 2013.
2. Raj, J. David Manuel (1977). *The Origin and the Historical Development of Silambam Fencing: An Ancient Self-Defence Sport of India*. Oregon: College of Health, Physical Education and Recreation, Univ. of Oregon. pp. 44, 50, & 83.
3. Sports Authority of India (1987). *Indigenous Games and Martial Arts of India*. New Delhi: Sports Authority of India. pp. 91 & 94.
4. Crego, Robert (2003). *Sports and Games of the 18th and 19th Centuries* pg 32. Greenwood Press
5. Green, Thomas A., ed. (2001). *Martial Arts of the World: An Encyclopedia*. ABC-CLIO. pp. 176–177. ISBN 9781576071502.