Physical and Health Education

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education in the colleges of Vidarbha. Ph.D., Edu. Nagpur Univ.

Problem: The study looks at the present state of affairs in the field of physical education and critically examines the gaps and loopholes which need to be bridged before making it an independent discipline.

Objectives: (i) To study the organisational, administrative and financial set-up for imparting physical education in colleges, (ii) to inquire into the programmes and practices in physical education in colleges, (iii) to study the physical plant facility in colleges, (iv) to assess the students' participation in sports at various levels, and (v) to find out the problems faced by colleges in running physical education programmes and to offer remedial suggestions for more effective utilisation of resources.

Methodology: The sample of the study comprised 92 arts, science and commerce colleges of nine districts of Vidarbha. They were chosen using the stratified random sampling technique. Out of the 92 colleges, 57 were from Nagpur University and 35 were from Amaravati University. The tools used included Questionnaire and Interviews. The collected data were treated using ANOVA and regression analysis.

Major Findings: (1) In most of the colleges, Univ. of Kalyani.

Akram, Khataybeh Z.H. 1992. A study of the number of physical education lecturers programmes and practices in physical ranged from one to two and of these, zero or one was a female lecturer. (2) Less than 50% physical education lecturers had postgraduate degree in academic fields in all the districts except in Nagpur, Bhandara, and Yeotmal, where the percentage was more. (3) In many colleges, the non-physical education lecturers were also found taking interest in training/coaching the students and were also given responsibilities for sports and games. (4) There was hardly any college which was providing more than 50% of the identified facilities and sufficient equipment. (5) In the majority of the cases, less than 50% time was specifically allotted and hardly any theory classes were conducted. (6) In the majority of the colleges, some fundamental skills were taught but less than 50% of the total games were practised in the allotted time. (7) All the colleges seemed to be conducting some sort of a test but these tests were different from the regular subject tests. (8) Most of the colleges were found raising money from students through fees and many lecturers expressed insufficient availability of funds. [GPK 1692]

> Bandyopadhyay, Kanchan. 1989. Effects of different conditioning programmes on selected somatic and physiological variables among school and college students. Ph.D., Edu.

Problem: This study compares the effects of rope skipping, circuit training and weight training on selected somatic and physiological variables among school and college students.

Objectives: (i) To compare three training methods and their effects on students at different age levels, (ii) to evaluate the training effects through selected somatic and physiological variables, and (iii) to point out simple methods for prediction of acrobic from progressive rope skipping exercises.

Methodology: The subjects were selected randomly from 13 to 16 years of age from a secondary school, and for the college group the subjects were between 23 to 30 years from a teachers' training college. The subjects were assigned to three experimental groups and one control group for school and college students respectively. Somatic variables tests were conducted for speed, vertical jumping ability, modified vertical power jump, ankle flexibility and grip strength. For physiological variables resting heart rate, blood pressure, blood hemoglobin, cardio-respiratory endurance, cardio-vascular efficiency and recovery cardiac cost were measured. For prediction of VO, max, bicycle ergometer test, actual measurement of VO, max from expired gas after a step test and from progressive rope skipping exercises heart rates were recorded. The training was conducted thrice a week for each group and the training loads were determined according to age level. The progressive increment load method was followed for each group. The tests were conducted on different age groups before the onset of training and after the completion of the training programme. The experimental design adopted for this purpose was random group design. The collected data were treated with mean, SD, 't' test, F-test, and correlations.

Major Findings: (1) For improvement of speed, rope skipping was superior to other training methods and it was more evident in school agegroup than the college group. (2) For improvement

of vertical jumping ability weight training was superior in case of school students but with respect to college students there was no difference. (3) All the experimental groups improved significantly in right and left ankle flexibility. (4) Critical difference analysis showed that rope skipping was superior to the other training methods in this regard. (5) Resting heart rate reduced significantly in case of rope skipping and circuit training of school students and all the three experimental groups of college students. (6) ANOVA analysis showed significant difference in systolic blood pressure among the school groups only. (7) All the experimental groups showed significant improvement in mean blood hemoglobin. (8) Cardio-respiratory endurance was also significantly improved in all the experimental groups but it was more predominant in the rope skipping group. (9) Cardio-vascular efficiency was also significantly improved in all the experimental groups. (10) There was a high positive correlation among the sub-maximal heart-rate from bicycle ergometer test and heart rate of 10 minutes progressive rope skipping. [PDR 0615]

Banerjee, A.K. 1989. Performance evaluation of eastern Indian athletes using physical and physiological parameters. Ph.D., Edu. Univ. of Kalyani.

Problem: The study focuses on the performance evaluation of eastern Indian athletes through certain physical and physiological parameters with specific emphasis on comparing the performance in seven different sports, including typical Indian national games.

Objectives: (i) To compare the biological characteristics of athletes in the different sports, (ii) to assess the functional capacities of eastern Indian athletes in a systematic manner, (iii) to find the criteria of performance to be predicted from selected variables suitable for field study, and (iv) to formulate a comprehensive performance index for objective evaluation.

Methodology: The subjects were randomly selected from among the best available players at the state level from four states of eastern India. The different sports covered in the study included football (FTB), basketball (BKB), kabaddi (KBD), kho-kho (KHO), athletics (ATH), gymnastics (GYM) and swimming (SWM). The physical and physiological parameters were measured in the static and dynamic states. The physical parameters included, height, weight, body surface area, limb length, girth measurement, gait study (for speed cadence) and step length. The physiological parameters included heart rate, oxygen consumption, pulmonary ventilation, energy expenditure and O, pulse. The collected data were treated using mean, SD, 't' test, correlation and multiple correlation.

Major Findings: (1) The structure of the athletes in the different sports was found to be different, this could be attributed to the requirements of the different games. (2) The FTB and ATH groups had higher values in all the kinematic factors than the BKB, KHO and GYM groups, whereas the SWM and KBD groups scored in the middle range. (3) Among the physiological parameters measured during the dynamic condition, there was not much difference in maximum heart rate among the different athletic groups; only GYM was significantly different from the others. (4) The highest VO, max was observed in the FTB, followed by SWM and ATH. (5) In gait characteristics, the various athletic groups differed. (6) In overall performance capacity, the FTB. ATH and SWM groups were superior to the other groups. (7) In physiological capacity, the FTB, ATH and SWM were significantly better than the KBD, GYM and KHO groups. The BKB group was close to the FTB group but significantly different from all other groups. [PDR 0616]

Basra, Surjit Singh. 1991. A study of motor skills, physical fitness and selected psychological variables in male college hockey players. Ph.D., Edu. Panjab Univ.

Problem: The interrelationship between motor skills, physical fitness and selected psychological variables were examined in this study.

Objective: To find out the interrelationships between motor skills, physical fitness and psychological variables.

Methodology: The sample included 200 male college hockey players who were selected through the stratified random sampling technique. The tools used to collect the data included Hockey Test Battery by Sangral, AAHPER Youth Physical Fitness Test (revised) and Eysenck Personality Questionnaire. The collected data were treated with Pearson's product-moment correlation, zero order correlation and partial correlation.

Major Findings: (1) Scoop for accuracy was negatively correlated with endurance and speed, but not with muscular endurance, abdominal strength and power. (2) The physical fitness components, i.e. agility, speed, endurance, power and muscular endurance had a multiple correlation with scoop for accuracy. (3) Scoop for accuracy was positively correlated with introversion, but not with psychoticism, neuroticism or lie scores. (4) Extraversion and lie scores had a joint positive relationship with scoop for accuracy. (5) There was a significant negative correlation of self-hit or stop with endurance, agility and speed, but not with muscular endurance, abdominal strength or power. (6) Endurance, speed, agility and abdominal strength had a significant multiple correlation with self-hit and stop. (7) Self-hit and stop was correlated with extraversion, but not with psychoticism, neuroticism or lie scores. (8) Dribble and push had a significant negative correlation with endurance, ability and speed, but not with muscular endurance, abdominal strength and power. (9) Dribble and push had a multiple correlation with extraversion, psychoticism and neuroticism. [AK 1675]

Bhattacharya, Shukla. 1991. Project nutrition, health education and environmental sanitation: An impact study. Independent study. National Council of Educational Research and Training.

Problem: The study addresses the question of enhancing the level of pupil achievement through an intervention in the formal curriculum and enhancing the perception and practices of community members in respect of nutrition, health education and environmental sanitation (NHEES) through extensive community contact programme. The problem is examined by undertaking two studies: (1) Pupil Achievement Study, and (2) Community Contact Programme.

Objectives: (i) To assess pupils' achievement in the area of nutrition, health education and environmental sanitation in terms of knowledge, understanding, skills and attitudes with the help of curricular intervention programme in related areas, and (ii) to assess attainments of community members in enhancing their perception and practices in respect of nutrition, health and environmental sanitation as an effect of the intervention programme of the community.

Methodology: The universe of the study comprised the project schools of Bihar, Karnataka, Maharashtra, Mizoram, Orissa, Rajasthan and Uttar Pradesh. A random sample of 30 schools were selected from among 100 project schools which were identified in each state. Out of the 30 schools, 50% (15) were those schools where an extensive community contact programme was conducted. In the remaining 50% (15) schools no community contact programme was conducted. A random sample of 10 nonproject schools was selected from among schools located in the proximity of project schools. Thus, the total sample of schools included three groups: Group 1—Experimental Schools, Group 2— Experimental Schools + Community Programme, Group 3-Non-project Schools. The tools used included information blanks, schedules, achievement test and questionnaire cuminterview schedule. The collected data were treated using percentage, mean, median, mode,

SD, skewness, Cochran C and Bartlett Box Ftest, step-wise multiple regression analysis, ANOVA, ANCOVA, Mann-Whitney U test, Wilcoxon rank sum W test, the Kruskil-Wallis one-way ANOVA, Friedman's two-way ANOVA test and Wilcoxon matched pairs signed rank test.

Major Findings: (1) As regards the pupil achievement test, there was a hierarchical relation among various cognitive components i.e. A, U and K. Although correlated, these components seemed to have some elements which were uncommon. They seemed to influence the achievement of pupils on these components of achievement. (2) Sex was not related to any of the dependent variables, i.e., total scores (scores on knowledge, understanding, application and skills). The project intervention benefited the males and females equally well. (3) As regards the socio-economic variables, father's occupation and education as well as mother's occupation were significantly related to T, K, U, A and S. (4) Attendance was significantly related to all the dependent variables. (5) The high level of achievement of pupils in Classes I and II decreased gradually in Classes III, IV and V. (6) The total pupil achievement and the achievement in components K, U, A and S seemed to be influenced more by factors of school ecology rather than home ecology. (7) The overall evidence at hand strongly indicated that the impact of the project intervention was significant and positive in enhancing the level of pupils with respect to T, K, U, A and S. (8) The total achievement of pupils differed from state to state. (9) The overall results indicated that the impact of the community contact programme was extremely positive. [DPSEE 0526]

Bhowmick, S. 1989. Biomechanical analysis of swing movements in running and jumping. Ph.D., Edu. Univ. of Kalyani.

Problem: The study investigates the biomechanical changes that are involved in swing movements of running and jumping. Objectives: (i) To analyse the nature and effects of secondary swing movements of arms and lead leg during running and take-off in high jumping and broad jumping, (ii) to compare the effects of different swing elements on the main body movement, and (iii) to formulate the correct type of swing movements on the basis of the suggested mechanical model of the improved technique.

Methodology: The study was conducted on 15 state-level runners and jumpers who were selected on the basis of sports performance. The various items of equipment used included 16 mm movie camera, electronic stop watch, projector, movement analyser and calculator. The collected data were treated using mean.

Major Findings: (1) In running, the velocities of swing elements, viz. arms and lead leg were found to increase with the increase of velocity of the main body. Horizontal velocity of the main body was always greater whereas the vertical velocity was found to be lower than those of the swing elements. (2) The nature of horizontal velocities of different swing elements was different but the nature of their vertical velocities was similar. (3) Swing elements were found to follow a particular pattern in accelerating their movement with respect to that of the main body, both in running and jumping. They were found to achieve maximum acceleration prior to the main body. This was followed by a strong retardation of their movements and it was accompanied by a sharp increase in acceleration of the main body movement. (4) Swing elements were found to cause the upward shifting of the centres of gravity of the main body during their upward movement. (5) Swing elements were found to initiate a rotational movement of the main body around its longitudinal access in high jumping. [PDR 0617]

Blah, Mary Dora H. 1988. A study on the role of the government in the promotion and development of sports and cultural activities

in Meghalaya. M.Phil., Edu. North-Eastern Hill

Problem: This is an exploratory study of the role played by the state government in the promotion and development of sports and cultural activities in Meghalaya, in general, and Shillong in particular.

Objectives: (i) To find out the position regarding the implementation of plans and programmes for the promotion of sports and cultural activities in Meghalaya, (ii) to find out the impact of the programmes on the beneficiaries, and (iii) to suggest ways and means to further promote the cause of sports and cultural activities in the state.

Methodology: The universe of the study included all personnel working in the State departments of sports, art and culture as well as those employed in the North-Eastern Hill University and other voluntary organisations. The personnel represented officials, coaches, students and trainees. A representative sample of respondents was selected for the study. The relevant data were collected from official records and supplemented by a questionnaire. The collected data were treated with percentages and qualitative methods.

Major Findings: (1) Various sports and youth welfare programmes in Meghalaya were administered through the Department of Sports and Youth Welfare with the help of District Sports Officers. (2) Various sports associations in the state were assisted financially to host tournaments, hold training camps, etc. (3) Rural sports tournaments had been conducted at all levels. (4) Local boys and girls were encouraged to avail of National Talent Search Scholarships in sports and suitable candidates were sponsored for higher level diploma at the National Institute of Sports. (5) The State Institute of Art and Culture acted as the nucleus for all cultural activities in the state; this included dance and song forms. (6) The state government arranged cultural exchange programmes including the participation at international festivals. (7) The State Institute of Art and Culture gave awards for literature every year and it also brought out its own publications. [PPG 0166]

Brar, Harjinder Singh. 1991. A critical analysis of the policies of physical education and sports in India since Independence. Ph.D., Edu. Punjabi Univ.

Problem: The study examines the policies of physical education and sports in India since Independence.

Objectives: (i) To study the development of physical education in the pre-Independence era in India, (ii) to study the development of sports policy in India since Independence, (iii) to study the composition, content, purpose and achievements of institutions like Sports Authority of India, SNIPES, etc., in the light of India's requirements and potential, (iv) to analyse problems of physical education and sports and to see how the existing policies endeavour to meet them, and (v) to critically examine various policies so as to offer concrete proposals towards the formulation of a policy suiting India's potential and needs.

Methodology: The author consulted records, reports, resolutions, recommendations of different commissions and committees, proceedings of the All India Council of Sports, and the Sports Authority of India and declarations made by different state governments and legislations made in the field of sports and physical education. Besides, opinions of experts in the field of sports and physical education were also collected.

Major Findings: (1) The Buddhist period emphasised health of the body as an essential requirement for cultivating an enlightened mind. The universities of Taxila, Nalanda, Vallabh, Nadia, Kaushal, etc. had a strenuous curriculum connected with physical education and health. Pranayam and Yoga were two distinct disciplines invented and practised in India. (2) The 17th,

18th and 19th centuries can be called the 'Black Period' of Indian physical education and sports. The 20th century up to Independence, saw a humble beginning in organised sports. The year 1927 marked the threshold when the Indian Olympic Association was established which brought out the international concept of sports in the country and India made its mark in hockey and wrestling on the world map. (3) In 1951, India organised the first ASIAD. During the 50s, 60s and 70s, various sports and health activities were consolidated including the setting up of various committees. (4) Many institutions came up. (5) From 1975 onwards, the Government of India had been issuing sports policies, programmes and guidelines to state governments. The policy resolutions of 1974, 1984 and 1986 need special mention. [AK 1673]

Chandramani, M. 1988. Impact of nutrition education: Education at different levels. Ph.D., Home Sc. Univ. of Madras.

Problem: The study attempts to assess the impact of nutrition education on school-going children at different levels, i.e. pre-school, primary, secondary and higher secondary, in Coimbatore in terms of knowledge gained and changes effected in attitudes and nutritional practices.

Objective: To assess the impact of nutrition education among school-going children at different levels in terms of knowledge gained, changes effected in attitudes and nutritional practices.

Methodology: Nutrition education was evaluated among 696 children studying at four different educational levels, i.e. pre-school, primary, secondary and higher secondary. The pre-test, post-test design was used in assessing the impact of nutrition education. The collected data were suitably treated.

Major Findings: (1) Nutrition education had a positive impact on children at all levels in terms of the nutritional knowledge gained, attitudes and dietary practices. (2) The socio-economic factors influenced the gain in nutritional knowledge, attitudes and practices. (3) The type of family had no influence on the subjects in the impact of nutrition education. [MC 0089]

Chatterjee, Arun Kumar. 1988. A comparative study of personality characteristics of rank athletes in the local school population for identifying differential diagnostic features. Ph.D., Psv. Univ. of Calcutta.

Problem: The study has compared the personality characteristics of rank athletes and non-rank athletes in the local school population in Calcutta.

Objectives: (i) To study the personality characteristics of rank athletes and non-rank athletes, and (ii) to compare the personality characteristics of the two groups.

Methodology: Using the multi-stage sampling technique, 225 boys and girls were selected under the rank athlete category and 350 boys and girls under the non-rank athlete category. In all, 575 subjects served as the sample. The tools used included the Background Information Schedule and Bengali version of Cattell's 16 Personality Factors Questionnaire. The collected data were treated using descriptive and inferential statistics.

Major Findings: (1) The vank athletes and the non-rank athletes did not differ on their background information. (2) The males and females among the two groups did not differ. (3) The rank athletes were found to be more outgoing, venturesome, realistic, confident and emotionally controlled as compared to non-rank athletes, apart from high enthusiasm and frustration tolerance. (4) Statistically significant differences were found between explosive release and controlled release types of rank athletes with reference to factors, C, E, I, Q₂, Q₃ and Q₄ personality factors. [SB 0075]

Chattopadhyay, Sandhya. 1989. Ayurveda manastattwa. (The science of mind according

to ancient Hindu medical science). Ph.D., Edu. Univ. of Calcutta.

Problem: The study makes a comparative study of the causation, typology and remediation of mental diseases as given in Ayurveda with those given in modern European medical science.

Objectives: (i) To study the Hindu medicine, Ayurveda, as an economical and effective treatment in the modern Indian social context, and (ii) to compare Ayurveda with modern European medical science.

Methodology: The researcher carried out an in-depth analysis of the information available on Ayurveda in comparison to modern European medical science.

Major Findings: (1) The study report has four chapters focusing on different aspects of medicine. (2) Chapter 1 deals with the concept and constituents of the mind in the light of Hindu medical classics. (3) Chapter 2 deals with personality, intelligence and memory as delineated in Ayurveda and their evaluation in the light of modern knowledge. (4) Chapter 3 deals with the etiology of mental diseases as given in Ayurveda vis-a-vis modern European medical science. (5) Chapter 4 deals with various remediation of mental diseases. [SPB 0200]

Dass, Charan. 1991. The achievement motivation, adjustment and creative thinking of college athletes in relation to their performance in track events. Ph.D., Edu. Punjabi Univ.

Problem: The study examines the achievement motivation, adjustment and creative thinking of college athletes in relation to their performance in track events.

Objectives: (i) To determine the relationship of the subjects' achievement motivation, adjustment and creativity with performance in track events, and (ii) to see the combined effect of the subjects' achievement-motivation, adjustment and creative thinking abilities on their performance in track events.

Methodology: The sample comprised 300 track-event male athletes of the 100 metres, 400 metres and 1,500 metres race and the 110 metres hurdle race. They were selected from six districts of Punjab. The tools used included: Rao's Achievement-Motivation Test, Sinha and Singh's Adjustment Inventory for College Students and Torrance Tests of Creative Thinking—Figural Form A. The collected data were treated with mean, SD, 't' test, partial and multiple correlation.

Major Findings: (1) Achievement-motivation was found to be positively related to track performance and hurdle race. (2) High performers had higher achievement-motivation than low performers on all the track events. (3) High performers had better adjustment than low performers on all the track events. (4) Creativity was positively related to all track events. (5) Achievement-motivation, adjustment and creativity as a team could predict performance better than when they were considered separately. (6) No significant difference was found between athletes of the four track events with respect to achievement motivation. [AK 1844)

Desai, S.S. 1989. A study of morphometric measurements of Nagpur University sportsmen to evolve norms with reference to certain selected sports. Ph.D., Edu. Nagpur Univ.

Problem: Keeping in view the increasing attention to sports, the present study attempts to evolve norms for certain selected sports after studying the morphometric measurements of Nagpur University sportsmen.

Objectives: (i) To study the morphometric measurements of sportsmen of Nagpur University, and (ii) to evolve norms with reference to certain selected sports.

Methodology: The study was conducted on an experimental sample of 100 sportsmen and athletes of Nagpur University who represented the university teams in athletics, swimming and basketball, and a control group sample of 100

non-athletes who did not participate in any games. They were chosen randomly from among the college students of Nagpur. The tools used to collect data included: Anthropometre, Small Sliding Caliper, measuring tape, Skinfold Caliper, Wall Stadiometre and Detecto Medic Beam Balance Scale. The collected data were treated using mean, SD, 't' test and correlation.

Major Findings: (1) The athletes were found to have larger leg length as compared to nonathletes. (2) The percentage of fat hindered the performance of the athletes. (3) Athletes were found to be more ectomorphic and mesomorphic in nature. (4) The skilled group players were found more in ecto-mesomorphic and balanced ectomorphic groups. (5) The explosive group players were balanced. (6) There was a significant relationship between the structure and function of sportsmen in general. (7) There was a significant relationship of structure of sportsmen, skill, explosive speed and endurance group with their function. (8) The researcher evolved norms on various aspects such as height, weight, etc. as 'average', 'good' and 'very good' categories. [GPK 1617]

Dhaliwal, Sutinder Singh. 1992. Physical fitness of 10-18 year old males living at two selected altitudes. Ph.D., Edu. Punjabi Univ.

Problem: The study has examined the physical fitness of 10-18 year old males living at two different altitudes.

Objectives: (i) To ascertain the effect of altitude on the physical fitness of 10-18 year old males, year-wise, living at two altitudes — 2,000 feet and 7,100 feet above sea-level, (ii) to compare the physical fitness of 10-18 year old males belonging to upper and lower middle class categories, year wise, living at 7,100 feet above sea-level, and (iii) to compare the physical fitness of high altitude males with the males living in the plains.

Methodology: The sample comprised 1,080 male subjects, belonging to Bilaspur and Shimla,

representing the lower and higher altitudes respectively. They also belonged to different socioeconomic classes. The tools used included weighing machine for body weight, Anthropometric Rod for height, Lange Skinfold Caliper and physical fitness tests. The data were treated using mean, SD, 't' test, correlation, coefficient of variation, growth velocity and growth gradient.

Major Findings: (1) Altitude did not affect the height, weight, flexed arm hang, sit-ups, 50 metres sprint, forward bend and reach and 60 metre run/walk of males in the age-group of 10-18 years, (2) Higher-altitude males performed better than lower-altitude males in standing broad jump and shuttled run. (3) Affluency helped in increasing the height, weight and performance in 50 metres sprint but had a negative effect on forward bend and reach and 600 metre run/walk. (4) Affluence did not have any effect on flexed arm hang, sit-ups, shuttle run and standing broad jump. (5) The various measures of physical fitness were intercorrelated in general for lowaltitude non-affluent and high-altitude affluent groups but rarely for the high-altitude nonaffluent group. [AK 1845]

Dhanasekeran, G. 1990. A study of the awareness of primary and middle school teachers regarding health promotion among school children. M.Phil., Edu. Madurai Kamaraj Univ.

Problem: The study has examined the awareness level of primary and middle school teachers of health promotion measures in immunisation, nutrition, environmental sanitation and mental health for school children.

Objectives: (i) To assess the awareness of primary and middle school teachers regarding immunisation, nutrition, environmental sanitation and mental health, (ii) to assess the awareness of teachers regarding health problems in their schools, and (iii) to identify the health-promoting measures carried out by teachers in the schools.

Methodology: The sample comprised 190 teachers from 17 primary and middle schools in Anna District. The researcher used a questionnaire on the awareness of teachers regarding health promotion among school children. The collected data were treated using mean, SD and 't' test.

Major Findings: (1) The primary and middle teachers revealed low awareness of health promotion measures. (2) The majority of school teachers were not able to carry out health promotion measures properly and systematically. (3) Female teachers revealed more awareness on health promotion measures than male teachers. (4) Rural teachers were lower in their awareness of health-promoting measures than their urban counterparts. [MKU 1069]

Dhillon, Sukhjeet. 1991. A study of the relationship among leadership behaviour, organisational climate and demographic characteristics in physical education institutions in Punjab, Haryana and Delhi. Ph.D., Phy. Edu. Panjab Univ.

Problem: The study has investigated the relationship among leadership behaviour, organisational climate and demographic characteristics that exist in physical education institutions in Punjab, Haryana and Delhi.

Objectives: (i) To study the relationship between leadership behaviour and organisational climate in physical education institutions in Punjab, Haryana and Delhi, (ii) to compare the leadership behaviour of administrators and faculty members in physical education departments of universities and colleges and in all the 13 institutions in Punjab, Haryana and Delhi, (iii) to compare the organisational climate of teaching departments and non-teaching departments related to sports and in physical education departments of universities and colleges along with 13 institutions of Punjab, Haryana and Delhi, (iv) to compare the leadership behaviour and organisational climate among the

administrators with respect to rural background and urban background in terms of residence, and (v) to study the age-wise comparison of leadership behaviour and organisational climate among the administrators and faculty members of physical education institutions in Punjab, Haryana and Delhi.

Methodology: The sample comprised 143 administrators and faculty members. The tools used included: Leader-Behaviour Description Questionnaire—LED Q of Halpin and Organisational Climate Description Questionnaire, Form iv (OCDQ) of Halpin and Croft. The data collected were treated using mean, SD, correlation, 't' ratios and ANOVA.

Major Findings: (1) The administrators were attaining the organisational goals with the help of the faculty members by initiating actions and getting things done by defining and structuring their roles, having mutual trust for each other's ideas and consideration for feelings. (2) No significant differences were noted on initiating structure, consideration and total leadership between administrators and faculty members of teaching departments and non-teaching departments and the physical education departments of universities and colleges. But administrators and faculty members of all the 13 institutions of physical education varied on their leadership behaviour. (3) The faculty members had friendly social relations. They were more satisfied with their job. The administrators were more impersonal as compared to non-teaching departments of the universities. (4) Significant differences of leadership behaviour and organisational climate existed between the administrators of urban and rural backgrounds. (5) The administrators older in age exhibited higher initiating ability and consideration. The workload was well planned and they directed the situation in an efficient way as compared to the younger administrators. (6) No significant differences existed on organisational climate among the 13 institutions of physical education and the teaching and non-teaching departments. [JNJ 0262]

Gopalan, C. 1989. A study of the current status and relevance of community nutrition and health programmes through the health-care system. Independent study. New Delhi: Nutrition Foundation of India. [ERIC Funded]

Problem: The study has examined the current status and relevance of community nutrition and health education programme through the ICDS and the health care and school systems.

Objectives: (i) To study the major nutritional and health problems of urban, rural and tribal areas, (ii) to study the status and relevance of ongoing NHE programmes and the communication media used in the health sector, (iii) to compare the knowledge and certain health nutrition practices of beneficiaries' families in the ICDS and non-ICDS blocks in the urban, rural and tribal areas, and (iv) to identify the lacunae in the present NHE strategy and to suggest changes for improvement.

Methodology: The study was conducted in Baroda and Delhi. The sample of the Baroda region comprised 800 households covering 50 households per village/slum which were randomly selected. Within each setting, half the number of villages/slums were covered by the ICDS while the other half were not. The sample of the Delhi region comprised 493 households, covering both the rural and urban blocks. The tools used included Health Worker Schedule, School Teacher Schedule, Household Schedule and Interviews. The responses were analysed through percentages.

Major Findings: (1) The higher level officials did not accord a high priority to NHE and were not sufficiently oriented to the importance and know-how regarding NHE. (2) Almost all personnel acknowledged that NHE was needed to bring about and maintain good health but were sceptical about its practicability in the face of over-poverty of the people and their tenacious hold on traditional beliefs. (3) Most of the personnel had not received adequate training in content and communication strategies in NHE.

(4) Field-level workers faced several problems in imparting NHE, i.e. lack of audio-visual aids and lack of adequate time. Key functionaries of the ICDS and AWW spent undue amount of time in maintaining records. (5) By and large, there were no marked differences in NHE knowledge between beneficiary families covered by ICDS vis-a-vis their non-ICDS counterparts in selected urban, rural and tribal areas. (6) There was reduction in the number of wasted pregnancies in the ICDS areas. (7) The ICDS respondents had an increased level of awareness regarding the role of green, leafy vegetables in preventing blindness. (8) There were strongly held beliefs detrimental to good nutrition and health in both, ICDS and non-ICDS areas. (9) On the whole, the AWW group ranked the highest with regard to their KAP relating to most of the NH education parameters. (10) KAP related to parameters of NH education was significantly correlated to the respondents' educational status. [MSG 1154]

Gowri, K. 1991. Impact of nutrition education imparted through the mass literacy programme. M.Phil., Home Sc. Coimbatore: Avinashilingam Institute for Home Science and Higher Education for Women.

Problem: The study examines the impact of nutrition education imparted under varied conditions.

Objective: To impart nutrition education to the participants of the mass literacy programme and to evaluate its impact.

Methodology: The sample comprised 700 rural women in the age-group 20-40 years, divided into four sub-groups. The women in Group A received nutrition education through the mass literacy programme (MLP). Group B participated in MLP alone. Group C received nutrition education alone. Group D served as the control group. Trained animators conducted 30 nutrition classes of two hours' duration each for the women in Groups A and C. The impact was evaluated in terms of changes in nutrition knowledge, attitude and practices.

Major Findings: (1) The women in Group A, followed by Group C, gained more knowledge in nutrition. (2) The attitudes and practices of the women of Groups A and C were found to be more positive than those of the women in Group B. [MC 1684]

Kamble, Goraknath N. 1989. Health education in rural area: An in-depth study of the Telangaon Dabhade Primary Health Centre. M.Phil., Edu. Univ. of Poona.

Problem: This study concentrates on identifying the problems of a rural health centre.

Objectives: (i) To study the situation of health education in a selected rural area and watch its impact on the rural people, (ii) to describe the relationship between the socio-economic conditions of the rural people and health education, and (iii) to study the primary health centres' role in imparting health education.

Methodology: Using the case study method information was collected from 100 households from four selected villages around the primary health centre (PHC). Structured interview schedules were used to collect information from the households, the staff of the PHC and other government workers. A qualitative analysis of the information was made. Descriptive statistics like average, percentages, etc. were also employed to analyse the data.

Major Findings: (1) The socio-economic profiles of the selected households were found to be a factor for the uneven distribution of PHC in rural areas. (2) By and large, the PHC did not organise people for discussions on health and sanitation, etc. (3) The majority of the respondents did not make use of the PHC properly. (4) Villagers consulted health workers on different health problems before approaching the PHC, [LHB 0073]

Kang, Gurpreet Singh. 1991. A comparative study of sportsmen and non-sportsmen with respect to their personality needs, adjustment and attitudes. Ph.D., Edu. Punjabi Univ.

Problem: The study attempts to compare sports persons and non-sports persons, both male and female, with respect to personality needs, adjustment and attitudes.

Objectives: (i) To compare the personality needs and adjustment of (a) sports persons and non-sports persons, (b) male and female sports persons and non-sports persons, (c) sports persons of individual and group games, and (ii) to compare the attitudes of (a) sports persons and non-sports persons (b) male and female sports persons and non-sports persons, (c) sports persons of individual and group games.

Methodology: A number of schools were selected where students had taken part in district, state and national level sports. Using a socio-economic schedule for matching, from the same schools, a pool of 609 sports persons and 1,455 non-sports persons were identified. Finally, 152 sports persons (102 male and 50 female) and 152 non-sports persons (102 male and 50 female) were selected including 42 (30 males, 12 females) individual game and 110 (70 male and 40 female) team-game players-through the stratified random sampling technique. The tools used to collect data included Intelligence Test by Jalota, Socio-economic Schedule by T.S. Sodhi, Attitude Scale in Three Areas by Sodhi and Sharma, Attitude Scale in Four Areas constructed by the author, and T.A.T. (Indian adaptation by Uma Chaudhry). The collected data were analysed using mean, SD and 't' test.

Major Findings: (1) Significant differences existed between the personality needs, adjustment and attitudes of sports persons and non-sports persons, of sportsmen and non-sportswomen, sportsmen and sportswomen, and sportswomen and non-sportsmen. (2) Differences also existed between individual game and teamgame, sportsmen and sportswomen pertaining to various personality needs, adjustment and attitudes. [AK 1671]

Kasat, G. 1990. An evaluation of the physical education programme at the secondary school level in the Vidarbha region. Ph.D., Edu. Nagpur Univ.

Problem: This study evaluates the physical education programme in secondary schools in the Vidarbha region.

Objectives: (i) To study critically the physical education programme run in various schools of the Vidarbha region, specially in Classes VIII to X, (ii) to verify physical fitness, health, and recreational objectives, (iii) to measure the morale of physical education teachers and other subject teachers, and (iv) to study the facilities and equipment such as play-fields, and the various implements required to conduct different games and sports.

Methodology: The sample was drawn from secondary schools in the Vidarbha region of Maharashtra State, including nine districts of Vidarbha. A total number of 500 headmasters and the same number of physical education teachers of rural, urban Zilla Parishad and Mahanagar Palika secondary schools in Vidarbha, covering both boys and girls, were selected. The tools used to collect data included opinionnaire, questionnaire, and interview. The collected data were treated with factorial analysis, percentages, chi-square and correlations.

Major Findings: (1) It was found that 81% headmasters were satisfied with the work of their physical education teachers. (2) Around 26% of schools alloted more than Rs 4,500 per year for physical education. (3) Around 67% physical education teachers were aged between 30 to 49 years. (4) Around 61% physical education teachers had organised games and sports events. (5) Around 65% teachers were still continuing to take part in sports activities. (6) The majority of the schools followed the guidelines of two periods per week for each of the Classes VIII, IX and X. (7) Out of 500 schools of the sample, approximately 35% had low morale, 50% had average morale and 15% had high morale. (8) The experts

opined that there was a wide scope for change in the physical education programme. (9) The majority of the physical education teachers were confirmed in their jobs. (10) More than one-third of the teachers were professionally enlightened, and those who had developed as expert players were 18% (satisfactory). (11) Around 75% schools had some sort of playgrounds. (12) Around 42% schools maintained the playgrounds properly. [GPK 1621]

Kaur, Narinder. 1991. A study of pre-adolescent players in relation to their motor-fitness, intelligence and emotional stability. Ph.D., Edu. Punjabi Univ.

Problem: The study examines the effect of sex, intelligence and emotional stability on the motor-fitness of pre-adolescent players.

Objectives: (i) To study the effect of intelligence and emotional stability on the fitness of 9 and 12-year olds and combined 9 and 12-year old players, (ii) to find out the sex difference in motor-fitness, (iii) to find out the interactive effect of intelligence, emotional stability and sex on motor-fitness, and (iv) to find out the intercorrelations among intelligence, emotional stability and motor-fitness components.

Methodology: The sample comprised 300 randomly selected players including 100 (50 male, 50 female) 9-year olds, and 200 (120 male, 80 female) 12-year olds. For intercorrelation, this total sample was used, but for the factorial design only 113 subjects, covering 48 males and 65 females were retained. The tools used to collect data included a Questionnaire, Draw-a-Bicycle Test by Sharma, Draw-a-Man Test by Misra, Emotional Stability Test (EST) for Children by Gupta and Singh, and North Carolina Motor-Fitness Battery. For analysis, the players were grouped as high and low intelligent, and high and low emotional stability. Three-way (2x2x2) ANOVA and correlations were used to analyse the data.

Major Findings: (1) In the case of 9-year olds, out of the three main effects of sex, intelligence and emotional stability and four interaction effects for each of the five motor-fitness components, namely sit-ups (SU), sidestepping (SS), stand broad jump (SBJ), modified pull-ups (MPU), and squat thrust (ST), only the following were found to be significant: (a) girls performed better than boys in SBJ and in ST; (b) highintelligence players performed better than low intelligence players in MPU; (c) sex and intelligence had an interactive effect on SS, SBJ and MPU. (2) Among the 12-year olds: (a) girls performed better than boys in SBJ, (b) highintelligence players performed better than lowintelligence players in SS and SBJ, (c) none of the interaction effects was significant. (3) Among the combined group of 9 and 12-year olds: (a) boys performed better than girls in SU, SBJ and ST; (b) high-intelligence students performed better than low-intelligence students in SS, SBJ and MPU; (c) none of the interaction effects was significant. (4) For the 9-year olds, out of the 21 intercorrelations between intelligence, emotional stability, SU, SS, SBJ, MPU and ST, nine were significant where: (a) intelligence was correlated with MPU; (b) SU with SBJ, MPU and ST; (c) SS was related with SBJ, MPU and ST; and (d) SBJ with ST. (5) For the 12-year old students, out of 21 correlation coefficients, 15 were significant: (a) intelligence was related with emotional stability, SS, SBJ and MPU; (b) emotional stability was related with SS and MPU; (c) SU was related with SS, SBJ, MPU and ST; (d) SS with SBJ, MPU and ST; (e) SBJ with MPU and ST; and (g) MPU with ST. (6) For the combined group of 9 and 12 year-olds, 19 out of 21 intercorrelations were significant: (a) intelligence was correlated with emotional stability as well as all the five motorfitness components; (b) emotional stability with SU, SS, SBJ and ST; (c) all the five motor-fitness components were interrelated with each other; (d) emotional stability was neither correlated with intelligence nor with SU. [AK 1843]

Kaur, Daljit. 1990. Assessment of the physical fitness of high school girls of Punjab. Ph.D., Edu. Panjab Univ.

Problem: This study assesses the physical fitness of rural and urban high school girls of Punjab in the age-group 12 to 15 years.

Objectives: (i) To prepare the norms of physical fitness items as listed in Fleishuran's physical fitness test battery on high school girls of Punjab, (ii) to determine and compare the physical fitness index of urban and rural high school girls of Punjab, (iii) to compare the physical fitness of high school girls according to age-steps of 12, 13, 14 and 15 years on various components of physical fitness, and (iv) to enable the teachers of physical education to develop physical fitness programmes for those girls who do not possess the required standard of physical fitness.

Methodology: The total sample consisted of 4,000 high school girls in the age-group 12 to 15-years, drawn from the various urban and rural schools of Punjab. Fleishuran's Physical Fitness Test Battery was used as a tool to collect the data. Mean, median, SD, skewness, kurtosis, percentile scale, two-way analysis of variance (2 x 4 ANOVA) and 't' test were employed to analyse the data.

Major Findings: (1) The rural and urban groups differed significantly on physical fitness variables. (2) Different age-steps independently affected some of the dependent variables, while these age-steps interacted with regard to other variables. (3) There was a notable interaction between residence and age in the physical fitness variables. (4) Subjects with urban residence were significantly superior to rural subjects. (5) The physical fitness levels of 12, 13, 14 and 15 year-old girls differed significantly. [JNJ 0261]

Kaur, Prabhsharan. 1992. A comparative study of some psychological characteristics of women hockey players playing at different field positions. Ph.D., Edu. Punjabi Univ.

Problem: The study examines the selected

psychological characteristics of women hockey players playing at different field positions.

Objective: To investigate the differences in cohesiveness, cooperation, concentration, emotional stability, aggression and introversion-extraversion among women hockey players playing at different field positions.

Methodology: The sample of the study comprised 288 hockey players (198 members of playing women's teams and 90 waiting members) covering seven field positions. The tools used to collect data included Indian Adaptation of TAT, Cohesiveness Scale also termed as the Group Environment Questionnaire by Garron et al. and Group and Cooperation Attitude Scale constructed by the author. The collected data were treated with 't' test.

Major Findings: (1) In the case of cohesion, none of the 42 comparisons, 21 pertaining to the different field positions of playing members (Goalkeeper, Full-Back, Half Back, Centre-Half, Left-In and Right-In, Centre-Forward, Left-Out and Right-Out) and 21 pertaining to waiting players, yielded any significant difference. (2) None of the 42 comparisons, 21 comparing cooperation among playing members at different field positions and 21 comparing cooperation among waiting members at different field positions yielded any significant difference. (3) Among the playing members, left and rightouts were found to be more aggressive than goalkeepers. (4) None of the comparisons pertaining to concentration among the playing members at different field positions and waiting players at different field positions yielded any significant difference. (5) Regarding introversionextraversion: (a) goalkeepers were less introvert than centre-halfs, (b) goalkeepers were less introvert than left/right-ins, (c) full-backs were less introvert than centre-halfs, (d) full-backs were less introvert than left/right-ins, (e) fullbacks were less introvert than left/right-outs, and (f) half-backs were less introvert than centrehalfs. (6) Goalkeepers were found to be less stable emotionally than left/right-ins, centre-halfs and

left/right-outs. None of the 21 comparisons pertaining to the emotional stability of waiting members of different field positions yielded any significant difference. [AK 1808]

Kelvadi, N.R. 1991. A study of the relationship between burnout and locus of control among athletes. M.Phil., Psy. Bangalore Univ.

Problem: The study examines the relationship between burnout and locus of control among athletes.

Objectives: (i) To study the level of burnout in sportsmen, (ii) to study the level of burnout in team sportsmen as compared to individual-event sportsmen, (iii) to study the relationship between burnout and locus of control in sportsmen; (iv) to study the level of burnout in males as compared to females, (v) to study the locus of control of team-event sportsmen as compared to individual-event sportsmen, and (vi) to study the locus of control of male as compared to female sportspersons.

Methodology: The sample consisted of 80 sportsmen of whom 40 were those participating in individual events (athletics and swimming) and 40 in team events. Individuals who were not actively involved in competitive sports formed the control group. The sample consisted of male and female subjects in the age-range 15-35 years. The Maslach Burnout Inventory and Internal External Locus of Control Scale were used to collect the data. Parametric tests were used to treat the data.

Major Findings: (1) The results showed that several sportsmen experienced burnout, but no significant difference existed between individual and team-event sportsmen in the level of burnout. (2) Male sportspersons experienced more burnout than females, specially on emotional exhaustion. (3) Sportsmen and non-sportsmen differed in burnout on the personal accomplishment scale. (4) Individual and team sportsmen did not differ in their locus of control orientation. (5) Individual event sportsmen were found more individual in their orientation. (6) Male and female sports-

persons had no difference in their locus of control but females were more external, i.e. they attributed the outcome to chance, luck, fate, etc. Sportsmen had a more external disposition than non-sportsmen. (7) There existed a relationship between burnout and individual events on de-personalisation for sportsmen and non-sportsmen. Sportsmen who scored low on depersonalisation had more internal orientation and those who scored high had an external disposition. (8) Sportsmen and non-sportsmen differed in their relationship on de-personalisation and internality-externality. [GMK 1851]

Khan, Hussain Ahmed. 1990. A study of the effect of special sports training on some psychological attributes of athletes. Ph.D., Psy. Panjab Univ.

Problem: This study examines the effect of special sports training on some psychological attributes of athletes.

Objectives: (i) To find out the effect of sports training on some psychological attributes, and to pin-point those attributes and sport disciplines in which the maximum, minimum or no effect of sports training is registered, (ii) to find out the collective effect of sports training on the psychological attributes of male, female, and individual-game and team-game athletes separately, (iii) to find out the differences existing in the male and female athletes and individual-game and team-game athletes at the pre- and post-training levels separately, and (iv) to examine the changes taking place in the pattern of intergroup differences due to sports training.

Methodology; The sample consisted of 274 athletes comprising 230 males and 44 females. The age ranged between 20-25 years. Their education ranged between 10-16 years and experience between 3-10 years. The tools used to collect the data included Eysenck Personality Questionnaire, Sportsman Spirit Test by Dubey, Sports Competition Anxiety Test by Martens, Sports Achievement Motivation Test (SAMT) by

Kamlesh and Inventory of Factors Influencing Sports Career (IFISC) for the Assessment of Locus of Control by Kamlesh and Sharma. Mean, SD, 't' values, analysis of variance (ANOVA) and intercorrelations were used to analyse the data.

Major Findings: (1) In more than 50% of the sport disciplines included in the study, the attributes of skills, extraversion, neuroticism, competitive anxiety and sportsman spirit registered changes in the positive direction. (2) The positive changes in achievementmotivation and internal locus of control took place in 40% of the sport disciplines. (3) Changes in the attributes of psychoticisim was found in 33%, and social desirability and external locus of control in 20% of the sport disciplines. (4) The athletes belonging to team-games and male athletes registered more intense and positive changes when compared to the individual-game athletes and female athletes. (5) The pattern of intergroup differences in attributes changed considerably following the training programme. [JNJ 1804]

Khodaskar, A.N. 1991. A normative study of the cantability in male kabaddi players and comparison of the effects of selected yogic and non-yogic exercises on cardio-respiratory endurance and cantability. Ph.D., Edu, Nagpur Univ.

Problem: This study investigates the effects of selected yogic exercises on the cantability and cardio-vascular endurance in comparison to non-yogic exercises. It has developed age-wise norms of cantability, thereby trying to improve the cantability of kabaddi players.

Objectives: (i) To develop norms of cantability for national-level kabbadi players of different age-groups, and (ii) to find out an effective exercise programme for the development of the cardio-respiratory endurance and cantability of kabaddi players by comparing the results of yogic exercises and non-yogic exercises.

Methodology: The sample comprised 150

subjects in the age-group 8-25 years, who were randomly selected from the Degree College of Physical Education at Hanuman Vyayam Prasarak Mandal, Amravati, and divided into three groups of 50 each as Experimental Group A. Experimental Group B and Control Group. Before the division, they were administered tests. including Cant Duration in the game situation, Breath-holding after full inhalation and after full exhalation, Vital capacity and Harvard step test; and their height and weight were measured. The values of the initial and final tests of all the three groups were analysed with ANCOVA and the significance of difference between the values obtained from yogic and non-yogic training programmes was tested.

Major Findings: (1) Yogic training programmes were more effective in the improvement of the cantability and cardio-respiratory endurance in comparison to the non-yogic training programme used in the study. (2) The maximum cantability for the players of the sub-junior group was 24.50 seconds for 13-year olds and 27.50 seconds for 14-year olds. The junior group players had their maximum cantability as 28.05 seconds, while in the senior group it varied between 26.5 seconds to 31.7 seconds according to age. The best cantability was found in players of 27-28 years. (3) Experimental Group A, undergoing yogic exercises, made significant improvement in all the variables except external breath-holding. (4) Group B, undergoing non-yogic exercises, made significant improvement in vital capacity, external breath-holding and cardio-respiratory endurance. It did not show any significant improvement in the cantability. (5) The control group did not show any significant improvement in any of the selected variables. [GPK 1703]

Kumari, Aruna. 1988. A comparative study of the self-concept, adjustment and creative thinking of sports and non-sports school girls of Himachal Pradesh. Ph.D., Edu. Panjab Univ.

Problem: This study compares the selfconcept, adjustment and creative thinking of sports and non-sports school girls of Himachal Pradesh.

Objectives: (i) To ascertain whether there are significant differences in the self-concept, adjustment and creative thinking of school sports girls and non-sports girls, (ii) to find out differences in self-concept, adjustment and creative thinking between rural and urban school-going girls, and (iii) to find out the independent and interactive effects of sports/non-sports and rural/urban residence on self-concept, adjustment and creative thinking.

Methodology: The sample consisted of 600 students, covering 300 sports girls and 300 non-sports girls. The stratified random sampling technique was used for selecting sports girls and the random device was used for non-sports girls' selection. The tools used to collect the data included Self-concept Scale by Saraswat, Sinha and Singh's Adjustment Inventory and the Creative Thinking test by Mehdi. Mean, median, mode, SD, 2 x 2 ANOVA and 't' test were applied to analyse the collected data.

Major Findings: (1) Sports girls belonging to rural and urban areas were found better in physical, social and temperamental self-concept in comparison to non-sports girls of the same area. Non-sports girls were better in educational, moral and intellectual self-concept than sports girls. (2) Sports girls belonging to rural and urban areas were better in emotional, social and educational adjustment than non-sports girls. (3) Non-sports girls scored better in all creativity variables in comparison to sports girls. [JNJ 0260]

Maharajan, Ram Krishna. 1989. An analytical study of the sports facilities and programme of physical education in the schools of Nepal. Ph.D., Edu. Nagpur Univ.

Problem: This study examines the status of sports facilities in the schools of Nepal and the role of physical education facilities in making educational planning more effective and resultoriented, and explores the facilities existing in the schools of Nepal and the possibility of teachers organising sports activities effectively with the available facilities.

Objectives: (i) To study the status of the school-level physical education curriculum of Nepal, (ii) to find out the nature and extent of the existing sports facilities available in the schools of Nepal, and (iii) to propose a model plan of sports facilities for the effective implementation of the physical education programme as per the school curriculum of Nepal.

Methodology: The sample comprised 350 secondary schools which were selected out of the 644 secondary schools in Nepal. These were selected by adopting the stratified methods of sampling. These schools belonged to three different topographical regions, i.e. Mountain region = 100, Valley = 100 and Terai = 150. Interview schedules were used as tools. All the data were tabulated as a master chart. An analysis of existing sports facilities was also carried out.

Major Findings: (1) The physical education course was made an optional subject at the secondary level and schools did not have adequate sports facilities, trained physical education teachers and evaluation criteria. (2) It was found that 83% of schools of the Terai region had more than 10 ropnis of land (492.84 square metres) which might be considered adequate for physical education classes. (3) The average number of classrooms of the schools in all the regions were found inadequate in proportion to the strength of the students. (4) There was an inadequacy of playground facilities in schools. (5) Almost all the schools of the three regions had volleyball courts and kabaddi fields but demanded 'football grounds'. (6) Only 30% of the total schools had physical education teachers, and only 20% of the teachers were found trained. (7) All the respondent physical education teachers were found teaching other subjects like science, social studies, and health education in their schools. [GPK 1697]

Panachakel, Thomaskutty G. 1991. Health education and community development. Ph.D., Edu. Univ. of Pune.

Problem: The study examines the impact of health education on community development, especially in the context of women.

Objectives: (i) To review community development in the project area during the last ten years, and (ii) to find out the impact of health education on community development.

Methodology: The stratified random sampling technique was used to select 1,010 families covering five groups based on occupation of the head of the family, i.e. unskilled labour, skilled labour, farming, business and service. Questionnaires, personal interviews and observations were used to collect the data. Mean, SD, 't' test and chi-square were used to analyse the data.

Major Findings: (1) At the aggregate level, the programme had a significant impact on socioeconomic status, family income, level of literacy among mothers, indebtedness, savings, supplementing income through sub-occupation, membership in cooperative society, maintaining kitchen garden, promoting the use of sanitary toilets, listening to developmental programmes on All India Radio. It also had an impact on the nutritional status of pre-school children, particularly the underweight and the stunted; on immunisation; on attitude towards family planning methods and on the birth-rate. (2) No significant impact was found on housingfacilities, membership in association, newspaper reading, wastage in primary school education and the nutritional status of pre-school children. (3) Among the unskilled labour, the trends were similar to the aggregate-level findings except on nutritional status. (4) In the skilled labour category, some impact was noticed on: socioeconomic status, literacy among mothers, indebtedness, savings, supplementing income through sub-occupation, membership in cooperative society, maintaining kitchen garden, promoting the use of sanitary toilets, listening to

developmental programmes on All India Radio, attitude towards family planning, adopting family planning methods and reducing birth rate. (5) In the farming category, some impact was visible in socio-economic status, level of literacy among mothers, savings, supplementing income through sub-occupation, membership in cooperative society, maintaining kitchen garden, promoting the use of sanitary toilets, listening to developmental programmes on All India Radio, attitude towards family planning and birth rate. (6) In the business category, some impact was observed on attitude towards family planning and birth rate. (7) In the service category, some impact was observed on maintaining kitchen garden and in promoting the use of sanitary toilets. (8) The impact was greater in the unskilled labour category, followed by the skilled labour category. The business and service categories felt the least impact. (9) The programme helped to increase a positive attitude towards family planning and couples adopting natural family planning. [ASB 00421

Pankajam, G. and Shakuntala, N. 1990. Evaluation of mobile training teams in Tamil Nadu. Independent study. Madurai Kamaraj Univ. (UNICEF Funded)

Problem: This study assesses the adequacy of the training abilities of the trainers in implementing the ICDS package in Tamil Nadu.

Objectives: (i) To assess the adequacy of the training abilities of the trainers in terms of their academic qualifications, professional training and their orientation in the new concepts, (ii) to identify the infrastructure facilities available for training, (iii) to assess the scope, content of curriculum and the suitability of training strategies adopted by the mobile team, (iv) to find out whether block-level training is as economical as institution-based training, and (v) to provide a database and suggestions for improvement in the scope, objectives and curriculum of the mobile training programme.

Methodology: The investigator had three sittings with the different functionaries of ICDS. Three different interview schedules—one for Anganwadi workers, another for CDPOs and the third for the mobile team instructress were prepared. The investigator visited 14 project areas in different parts of Tamil Nadu, had direct observations in Anganwadis and held discussions and interviews with the different functionaries.

Major Findings: (1) There were inadequacies in the training of the Anganwadi workers. (2) No specific place was available for providing training. (3) Though every training team was provided with adequate furniture, there was no space for housing them. (4) The mobile teams did not possess AV equipment, adequate AV materials and books. (5) There was less emphasis on pre-school education. (6) The trainers were not adequately equipped with the knowledge and skills for training Anganwadi workers. (7) The mobile team was less mobile. [MKU 1094]

Parveen. 1991. A comparative study of khokho and basketball women players at interdistrict and inter-state levels in their motor abilities, intelligence and personality traits. Ph.D., Edu. *Punjabi Univ.*

Problem: The study focuses on the identification of differences in the motor abilities, intelligence and personality traits of kho-kho and basketball players as well as identification of differences between national-level and state-level players with respect to these variables for each of these games.

Objectives: (i) To identify the difference in motor abilities, intelligence and personality traits of inter-district and inter-state level kho-kho and basketball players, (ii) to compare the motor abilities, intelligence and personality traits of inter-district and inter-state kho-kho and basketball players, and (iii) to find interrelationships between the variables under study.

Methodology: The sample comprised 150 female kho-kho and 150 female basketball

players selected from Delhi, Haryana, Himachal Pradesh, J & K, Punjab, Rajasthan and U.P. In the case of each game, one-half of the sample were inter-district and the other half were interstate players. The tools used included Seven scales—C, E, M, N, Q_2 , Q_3 and Q_4 — of 'A' Form of Cattell's 16 PF, Hand grip, Leg and Back dynamometers, two sub-tests of Physical Fitness Test Battery of Malhotra, et al., i.e. 2.4 kilometre run and 60 metre Dash (for speed) and Non-verbal Intelligence Test by Lorge-Thorndike. ANOVA, 't' test and correlations were used to analyse the data.

Major Findings: (1) It was found that basketball players were more matured emotionally, more practical, more group-dependent, more relaxed and had more muscular strength but lesser speed as compared to kho-kho players. (2) Kho-kho and baskeball players did not differ from one another in assertiveness, shrewdness and discipline. (3) National-level players were found to be emotionally stable, more assertive, more shrewd, less group-dependent, more relaxed, and had more muscular strength, endurance and speed than state-level players.(4) National and statelevel players did not differ in respect of practicability, discipline and intelligence. [AK 1674]

Pattnaik, A. 1991. Nutritional status and its effect on physical development and oducational achievement. Ph.D., Home Sc. Utkal Univ.

Problem: The study examines the nutritional status and its effect on physical development and educational achievement.

Objectives: (i) To ascertain the nutritional status of children, (ii) to find out the factors responsible for nutritional deprivation, (iii) to find out the effect of nutritional status on physical development, (iv) to assess the environmental factors responsible for physical development of children, (v) to find out the causes for poor educational performance of students, and (vi) to suggest measures for amelioration of this situation and improvement of the health as well as education of children.

Methodology: Four groups of children, three groups of teachers and three groups of parents, belonging to the urban, rural and slum communities were observed. In each area of living, four age-groups of children (6, 7, 8 and 9 years of age), 28 in each group, with boys and girls in equal number were randomly selected. The parents' sample corresponded to the children's sample (both parents taken together). The teachers' sample was small since the children were selected from schools where the teacherpupil ratio was only 1:3. The tools used included questionnaire, interview schedule, Teacher Evaluating Inventory (TEI), Academic Achievement (AA) instrument to assess nutritional status. Family Environment Inventory and Anthropometric indicators test like height, weight, chest, head, etc. Means, intercorrelations and two-way ANOVA were used to analyse the data.

Major Findings: (1) The nutritional status of urban children was found to be better than that of rural children. Slum children had poorer nutritional status than children of both the rural and urban areas. So far as sex was concerned. boys had a little more calorie intake than the girls. (2) Parents' education in urban areas was higher than in rural and slum areas. (3) With regard to growth and development, urban children had better health than their rural and slum counterparts and rural children had better physical development than slum children. (4) In the case of different age-groups, each higher age-group had better growth and development. With regard to height and weight, urban children were better than rural and slum children. (5) Children of urban, rural and slum areas varied greatly both in their calorie intake and for their background variables. [KCP 0444]

Paul, Dinesh and Kaur, Tejinder. 1989. Status of the nutrition component of ICDS. Independent study. New Delhi: National Institute of Public Cooperation and Child Development.

Problem: This study looks into the nutrition

component, viz. supplementary nutrition services, coverage of beneficiaries, nutrition and health education services and extent of community participation in the nutrition intervention programme.

Objectives: (i) To study the present status of supplementary feeding in relation to the type, adequacy, regularity and availability of supplementary foods in different stages, (ii) to study the selection of beneficiaries for supplementary nutrition, (iii) to study the actual coverage of the target groups for supplementary nutrition, with special reference to the under-threes, (iv) to study the nutrition and health education services in terms of frequency of sessions and the topics covered, (v) to study the extent of community participation in the nutrition component, and (vi) to suggest ways and means of improving the implementation of the nutrition component.

Methodology: The sample of the project included CDPOs, supervisors, two Anganwadi workers under each supervisor, five beneficiary households under each AWC and two local leaders in each Anganwadi. Twenty-six ICDS projects were selected for the study. The data were collected using interview and observational schedules and by mailing a proforma to the institutions concerned. The collected data were treated using descriptive statistical methods and chi-square.

Major Findings: (1) The food supplement was adequate only in ten projects for the severely malnourished children and women beneficiaries. (2) In 51:7% of the 213 AWCs studied, the number of feeding days were less than 250 days in a year. It was significant to note that 25 AWWs reported feeding for less than 50 days in a year. The reasons were mainly irregular supply of ration at the AWC level and calamities like flood and drought. (3) All AWWs reported that the severely malnourished children were consuming the food at the centre. In Rajasthan, a majority of AWWs reported that all beneficiaries except preschoolers took food to their homes for

consumption. (4) AWWs reported the enrolment and attendance of beneficiaries on the higher side but no supportive statement could be made in the absence of on-the-spot observations. (5) In the majority of the projects, the frequency of the nutrition and health education sessions varied from daily to once a month. (6) Breast-feeding and supplementary feedings were topics reported by AWWs as being discussed by 58.6% of the beneficiaries. Maternal care was the least discussed topic (2.3%). (7) Language/illiteracy was not a constraint in the successful implementation of the nutrition and health services. (8) The mothers of the child beneficiaries mainly participated in the construction and repair of the AWC, as reported by 58 AWWs, and in the preparation and distribution of food. Thirty-one AWWs said that the mothers also provided fuel, and according to another 30, they managed the centre in the absence of the AWWs. Fifty AWWs said that the mothers of child beneficiaries did not help in any of the activities at the centre. [NS 1884]

Pflung, Bernd. 1988. The preventive aspects of Ayurveda in people's education. Ph.D., Edu. Univ. of Kerala.

Problem: The study examines the concept of prevention in Ayurveda in order to make a contribution to the theory of health education in people's education.

Objectives: (i) To analyse the current health situation in India, (ii) to analyse the current situation of health education in India, (iii) to summarise the fundamentals of Ayurveda, (iv) to analyse the structure of the main classical Ayurveda text in order to prove Ayurveda's interdisciplinary approach, (v) to analyse the Ayurvedic concept of prevention in order to develop a tool that can be applied to health education, (vi) to analyse the connections between modern health education and Ayurveda in order to prepare the ground for a re-definition of 'Ayurveda Health Education', and (vii) to frame a re-definition of 'Ayurveda Health Education' in

order to develop a tool for 'community health education' and to make a contribution to the theory of health education in people's education.

Methodology: The data were collected from the Sutra Sthana of the Charaka Samhita and the documents and texts available. They were analysed qualitatively.

Major Findings: (1) The state of health of the majority of the Indian population is hardly better than what it was about fifty years ago. (2) The gap between the healthy and the unhealthy has widened. (3) Health education is not imparted in India in a coordinated manner. (4) The terms 'maintenance of health' and 'prevention of disease' used in the text have been analysed and the differences between them have been brought out. (5) The mode of balance in Ayurveda is achieved through the practice of the principles of congruence of content and form. (6) The model of balance is a cycle which is of holistic dependency and total integration. (7) The important fundamentals in the concept of prevention in Ayurveda are: (a) the ideal personality of a human being; (b) the self-control of a human being; (c) the strengthening of the positive factors of a human being; and (d) the responsibility of a human being. (8) The concept of prevention in Ayurveda can be directed by the principles of modern health education, selfidentity, self-determination, responsibility towards one's health and life-long effort. [VR 1659]

Potdar, Rajkamal S. 1989. Mobilising education to reinforce the Primary Health Care through school children as change agents and revitalising the school health programme to attain the ultimate goal, 'Health for all by A.D. 2000'. Ph.D., Edu. Shreemati Nathibai Damodar Thackersey Women's Univ.

Problem: The study examines the impact of mobilising education to reinforce the Primary Health Care programme through the school health programme so as to attain the ultimate goal 'Health for all by A.D. 2000'

Objectives: (i) To evaluate the existing school health programme to find out whether it is achieving the results at the expected level, (ii) to assess the knowledge of teachers in relation to health, (iii) to assess the children's and their parents' knowledge and practices in relation to health, (iv) to design a curriculum on health for the pre-service and in-service education of primary teachers, and (v) to prepare a teaching-learning manual (with a modular and integrated approach) for the use of primary teachers regarding health, and activity sheets for the school children.

Methodology: The sample comprised primary school teachers and district public health nurses. The data were collected by using an opinionnaire, a questionnaire and an interview schedule with a marking scheme for appraising the quantitative as well as the qualitative aspects. The data were analysed by using percentage.

Major Findings: (1) Elementary school teachers appeared to have many misconceptions about health and health education, They possessed little understanding of the total school health programme and showed inadequate knowledge of the health education subjectmatter. (2) Though the health authorities were being involved in the school health programme, there was a lack of proper coordination among the education, social welfare and health departments. (3) Health education and management of school health programme were not included in the pre-service or in-service education of teachers and hence, the teachers were unable to integrate the health education topics with other school subjects. (4) The study recommended mobilising education to reinforce primary health care through the school as a change agent. [AGB 0027]

Ramamohan, Vijayalakshmi. 1990. Nutrition education for adolescents (13-15 years) through games. Ph.D., Home Sc. Sri Venkateswara Univ.

Problem: The study aims at creating and also improving the awareness of nutrition among adolescents by using games as a medium to improve their knowledge and health practices and, ultimately, their health status.

Objectives: (i) To assess the interest of adolescents in games and identify popular games which can be selected for the study, (ii) to list out nutrition-related concepts in the high school syllabus and to compare these with the concepts of the NCERT syllabus, (iii) to develop a nutrition game-kit on the basis of (i) and (ii) and to offer divergent student-centred learning activities for varying abilities and interests, (iv) to utilise the kit in the school for Class IX children to develop the skills of thinking, investigation, discussion and decision-making regarding foods and nutrition and their relationship with health, (v) to evaluate the efficacy of the kit using selfdeveloped evaluation tools in order to study the knowledge and practices of the adolescents, and (vi) to enable the adolescents to find out through discovery and enquiry-learning, the benefits of eating more nutritious food by availing themselves of local and low-cost foodstuffs.

Methodology: The sample comprised 206 students of Class IX. Among them, 126 students formed the experimental group, while 80 formed the control group. A nutrition-knowledge test, a nutrition practical-situation test and a nutrition games-kit were used in the study, Analysis of variance and 't' test were used to analyse the data.

Major Findings: (1) The experimental group had improved significantly in its nutritional knowledge and also in practical-situation tests. (2) The knowledge gained was retained as revealed in a follow-up study. (3) The nutritional gameskit could be successfully used to improve nutritional knowledge among children.[AVRR 1265]

Sandhu, Kiran. 1988. A comparative study of sportswomen and non-sportswomen in selected psychological and sociological variables. Ph.D., Edu. Jamia Millia Islamia.

Problem: This study compares the personality and socio-economic status of sportswomen with non-sportswomen in respect of selected psychological and sociological variables.

Objectives: (i) To study the personality factors of sportswomen and non-sportswomen, (ii) to compare the personality factors of sportswomen and non-sportswomen, (iii) to study and compare the socio-economic status of sportswomen and non-sportswomen, (iv) to find out the dominant personality factors among women participants in sports, and (v) to study the influence of socio-economic status on the sportswomen in their choice of sports.

Methodology: The sample consisted of 200 sportswomen and 200 non-sportswomen, randomly drawn from various colleges of Delhi during the academic sessions 1984-1985 and 1985-1986. The tools used to collect the data included 16 PF Questionnaires by Cattell to measure personality factors and Socio-economic Status Scale. The collected data were treated by using mean, SD and 't' test.

Major Findings: (1) The sportswomen (SW) were found to be more tough-minded and groupdependent and less submissive, shy and sober as compared to non-sportswomen (NSW). (2) Both groups were found to be reserved, less intelligent. emotionally less stable, conscientious, suspicious, practical, shrewd, self-assured and experimenting, uncontrolled as well as relaxed. (3) In team games, SW differed significantly from NSW. In individual games, SW differed significantly from NSW on factors B, O, Q, and Q4. (4) No significant differences were found between the two groups on factors A, C, F, G, H, M, N, and Q2Q4. (5) Non-sportswomen scored higher on all the factors of socio-economic status indicating a relatively better socio-economic background than that of the sportswomen. (6) Representation in team games by SW was in a significantly low proportion from the upper middle class and in a high proportion from the lower middle class as compared to the participation in individual games. [SPR 0596]

Sandhu, Nachhattar Paul Singh. 1992. A study of achievement-motivation, socio-economic status, educational aspirations and physical performances of high school hockey players and non-players. Ph.D., Edu. Punjabi Univ.

Problem: The study analyses the differences in achievement-motivation, socio-economic status, educational aspirations and physical performance of high-school level hockey players and non-players.

Objectives: (i) To find out the interrelationship between achievement-motivation, socio-economic status, educational aspirations and physical performances of hockey players and non-players, and (ii) to find out the differences in achievement-motivation, socio-economic status, educational aspirations and physical performances of male and female subjects.

Methodology: The sample comprised 200 (100 male, 100 female) hockey players and 200 (100 male, 100 female) non-players from four districts of Punjab in the age-group 15-17 years. Rao's Achievement-Motivation Test, Srivastava's SES Scale, and Saxena's Educational Aspiration Scale were used as tools to collect the data, along with performance in100-metre race and standing vertical high jump. The collected data were analysed using mean, SD, 't' test, coefficient of correlation and one-way ANOVA.

Major Findings: (1) Compared with nonplayers, hockey players had a higher achievement motivation, higher SES, higher educational aspirations, higher performance in the 100metre race and standing vertical high jump. (2) Compared with females, the males had a higher achievement-motivation and performed better in the 100-metre race as well as standing high jump, while males and females did not differ in their SES and educational aspirations. (3) Participation in hockey and sex had an interaction effect on achievement-motivation; participation in hockey affected the achievementmotivation of females more than the males. (4) Participation in hockey and sex had an interaction effect on SES as well as educational aspirations, the difference in aspiration, of players and non-players was more in the case of males than females. (5) Level of aspiration of male players was more than that of male non-players and that of female players was more than that of female non-players, (6) Participation and sex had an interaction effect on performance: (a) participation in the 100-metre race facilitated males more than females, (b) standing high jump participation facilitated the females more than the males. (7) Among both males and females, performance in the 100-metre race of players was better than non-players. (8) Among both males and females, performance in standing high jump of players was better than non-players. (9) Achievement-motivation, SES, educational aspirations, performance in the 100-metre race and standing high jump were significantly intercorrelated for male hockey players, female hockey players, male non-players and female nonplayers. [AK 1710]

Sidhu, Pyara Singh. 1992. A study of the professional competence of physical education school teachers in relation to their intelligence, emotional maturity, self-esteem and environmental facilities. Ph.D., Edu. Panjab Univ.

Problem: The study examines the interrelationship between the professional competence of physical education school teachers, their intelligence, their emotional maturity, their selfesteem and environmental facilities.

Objectives: (i) To find out the nature and magnitude of the relationship between the criterion measures and predictors of professional competence, and (ii) to identify the factors contributing to professional competence.

Methodology: The sample comprised 300 physical education school teachers, including

male and female, working in rural/urban, private/government, higher/senior secondary schools, selected through the incidental-cumpurposive sampling technique. Also, 1,200 students were taken to obtain ratings about the teachers. To collect the data, the tools used included Teacher Attitude Scale by Grewal, Pupils' Rating Scale constructed by the author, Raven's Standard Progressive Matrices, Emotional Maturity Scale by Singh and Bhargava, Self-Esteem Scale by Sharma and Environmental Facilities Scale developed by the author. Mean, SD, 't' test, coefficient of correlation and linear regression analysis were used to analyse the collected data.

Major Findings: (1) Intelligence was found to be positively related to the teaching attitude and the total of pupils' ratings of teachers. (2) Selfesteem was related to pupils' ratings as well as teaching attitude. (3) Environmental facilities were positively correlated with the totals of pupils' ratings and with total attitude scores. (4) Emotional adjustment was related to pupils' ratings and with attitude. The sub-measures of emotional unstability exhibited significant positive correlation with pupils' ratings and with attitude. (5) Emotional regression was positively related with pupils' ratings and with total attitude score. Social maladjustment was positively related to pupils' ratings and total attitude score. Personality disintegration was positively related to pupils' ratings and teaching attitude. Lack of independence was related with pupils' ratings and teaching attitude. [JNJ 1669]

Singh, Daljit Inder. 1992. A study of the motor abilities, physical and physiological characteristics of male adolescent gymnasts, track and field athletes and non-sportsmen. Ph.D., Edu. Punjabi Univ.

Problem: The study compares the motor abilities and the physical and physiological characteristics of gymnasts, track and field athletes and non-sportsmen.

Objectives: (i) To find out the motor abilities, age, height, weight, body fat, aerobic and anaerobic capacity of male adolescent gymnasts, track and field athletes and non-sportsmen, and (ii) to compare the motor abilities, age, height, weight and body fat, aerobic and anaerobic capacity of gymnasts, athletes and non-sportsmen.

Methodology: The sample comprised 275 subjects from the 13-16 year age-group, including 75 gymnasts, 75 track and field athletes and 75 non-sportsmen. The tools used to collect the data included Barrow Motor Ability Test, Harvard Step Test and Sargent Jump Test. The collected data were treated by using mean, SD and 't' test.

Major Findings: (1) Differences existed between gymnasts, athletes and non-sportsmen regarding motor abilities, physical and physiological characteristics. (2) Athletes performed better than gymnasts in medicine-ballput, zigzag run, motor stability, anaerobic and aerobic capacity and had shorter height and lower body fat. (3) Gymnasts performed better than non-sportsmen in standing broad jump, medicine-ball-put, zigzag run, motor ability, anaerobic and aerobic capacity and had shorter height and lower body fat. (4) Sportsmen performed better than non-sportsmen in standing broad jump, medicine-ball-put, zigzag run, motor ability, anaerobic and aerobic capacity and were heavier in weight and possessed lower body fat. (5) Among sportsmen and non-sportsmen, age affected motor abilities and physical as well as physiological characterisation. [AK 1716]

Singh, Darshan. 1991. Self-image, body-image and movement-image of sportsmen in relation to their level of participation. Ph.D., Edu. Punjabi Univ.

Problem: The study examines the self-image, body-image and movement-image in relation to the level of participation of sportsmen.

Objectives: (i) To find out the difference in the self-image, body-image and movement-image of

university-level and inter-varsity-level gymnasts, (ii) to find out the interrelationships between (a) 'Real' self-image, 'Ideal' self-image and 'Perceived' self-image, (b) 'Real' body-image and 'Ideal' body-image, (c) 'Real' movement-image and 'Ideal' movement-image, separately for university-level and inter-university-level gymnasts, and (iii) to find the interrelationships and joint relationships between different aspects of self-image, body-image and movement-image.

Methodology: The sample comprised 100 university-level and 100 inter-university-level gymnasts of Punjab in the age-group 16-25 years. The tools used to collect the data included Deo's Self-concept List, Body Image Test adopted by Doudlah's 1962 Body Image Q-Sort Statements, and Movement Image Test by Doudlah. Mean, SD, 't' test, Pearson's product-moment correlation and multiple correlation were used to analyse the data.

Major Findings: (1) The inter-university gymnasts had a higher 'real self-image' and 'real-image' but a lower 'ideal self-image', and a lower 'ideal body-image' as compared to university-level gymnasts.(2) There were no significant differences between them regarding 'perceived self-image,' 'real body-image' and 'ideal movement-image'. (3) For both levels of gymnasts, the image of self, body and movement were in general related. [AK 1672]

Singh, Darshan. 1992. A study of the sports achievement of secondary schools of Punjab in relation to the physical education programme, coaching and physical facilities. Ph.D., Edu. Punjabi Univ.

Problem: The study examines the effect of physical education programmes, coaching and physical facilities on the sports achievement of high and senior secondary school-boys of Punjab.

Objectives: (i) To examine the physical education programmes, physical and coaching facilities in the schools pertaining to track and field activities, (ii) to study the achievements of schools in the field of sports and non-performance in track and field events in zonal and interzonal competitions, and (iii) to find out the difference in the achievement of students in track and field events due to physical education programmes, coaching facilities and physical facilities in the secondary schools of Punjab.

Methodology: The sample included 300 schools, selected through the stratified random sampling technique. The schools were classified as Category I, II and III schools, based on the performance, physical facilities, and coaching facilities. The tools used to collect the data included a questionnaire developed by the author along with an interview schedule. The data were analysed using mean, SD, and 't' test.

Major Findings: (1) Performance in track and field events of Category I schools was better than those of Category II and Category III schools, whereas no significant difference was found between the sports performance of Category II and III schools. (2) The maximum-physicalfacilities schools had better track and field performance than the minimum-physicalfacilities schools and the mediocre-physicalfacilities schools performed better than minimum-physical-facilities schools. However, no significant difference was found in the sports performance of maximum and mediocrephysical-facilities schools. (3) The maximumcoaching-facilities schools had better performance in track and field events than the mediocre and minimum-facilities schools, but no significant difference was found between the sports achievement of mediocre and minimumfacilities schools. [AK 1719]

Singh, Kewal. 1992. A study of the physical fitness and personality traits of boxers at different levels of competition. Ph.D., Edu. Punjabi Univ.

Problem: The study examines differences in the physical fitness and personality traits of boxers of different levels. Objective: To compare the physical fitness and personality traits of boxers at different levels of competition.

Methodology: The sample comprised 212 boxers of India; it included inter-college, inter-district, inter-university, national and international-level players. The tools used to collect the data included Haro-Singer Fitness Test and Cattell's 16 PF questionnaire. The collected data were treated using correlations, one-way ANOVA and Scheffes post hoc test.

Major Findings: (1) Out of the 16 personality factors, significant differences were found in the boxers of different levels in only two factors. (2) Out of the seven components of physical fitness, no significant differences were found in the boxers of different levels. (3) No significant differences were found between boxers of different levels with respect to the Figure Eight Run, Shuttle Run and Ball Throw. (4) None of the 560 correlations between personality factors and physical fitness components for the five levels of boxers was significant. [AK 1592]

Smitha, G. 1992. Assessing the efficiency of selected instructional materials developed for popularisation of wheat and wheat products. M. Phil., Home Sc. Coimbatore: Avinashilingam Institute for Home Science and Higher Education for Women.

Problem: This study attempts to assess the efficiency of selected instructional materials developed for popularisation of wheat and wheat products.

Objectives: (i) To develop instructional materials on wheat and its products, (ii) to create awareness regarding the nutritional contribution of wheat and its products using instructional materials, and (iii) to evaluate the impact of the designed strategey.

Methodology: The sample comprised 180 women, grouped into six groups with five groups as experimental groups and one as the control

group. The experimental groups were administered selected instructional materials specially developed for the study. The instructional materials were prepared on nutrition and emphasis was laid on the nutritional aspect of wheat and its products. Intensive education was given by subjecting all the experimental groups to the selected instructional materials developed. The impact of the study was evaluated.

Major Finding: Subjects who were exposed to the instructional materials gained knowledge on wheat and they started preparing more recipes with wheat and its products. [MC 1686]

Sreedevi, V. 1990. Knowledge, attitudes and practices of nutrition among adult education programme instructors in Andhra Pradesh. Ph.D., Adult Edu. Sri Venkateswara Univ.

Problem: The study assesses the knowledge, attitudes and practices of nutrition among adult education instructors' institutions in Andhra Pradesh.

Objectives: (i) To assess the levels of knowledge, attitudes and practices of nutrition among adult education programme instructors in Andhra Pradesh, (ii) to suggest the probable items of nutrition that can be incorporated in the training-programme course-content of the adult education instructors on the basis of gaps in knowledge, attitudes and practices, (iii) to find out the influence of socio-economic and demographic factors on the knowledge, attitudes and practices of nutrition among adult education instructors, (iv) to assess the interrelationships among knowledge, attitudes and practices in nutrition of adult education instructors, and (v) to study the differential contribution of the socio-economic and demographic variables in predicting knowledge, attitudes and practices of nutrition among adult education instructors.

Methodology: A total of 600 adult education instructors, working in six adult education projects in six districts in three regions of Andhra

Pradesh formed the sample of the study. The tools used to collect the data included a test to measure knowledge in nutrition, an attitude scale on nutrition, and a development check-list to measure nutritional practices. The collected data were treated using mean, SD, 't' test, 'F' ratio, Kramer's test, correlation and step-wise regression analysis.

Major Findings: (1) The level of knowledge, attitudes and practices of nutrition among adult education instructors were adequate. (2) There were variations in the level of knowledge, attitudes and practices on different items of nutrition among the adult education instructors. (3) Out of 16 socio-economic and demographic factors, 12 variables, namely, age, sex, annual income of the family, caste, marital status, occupation, educational status, family type, size of the family, experience as an adult education instructor, reading newspapers, and listening to radio had significantly influenced the knowledge of nutrition among the adult education instructors. (4) Among the 16 socio-economic and demographic variables only 8 variables, namely, age, annual income of the family, marital status, occupation, educational status, family type, size of the family and listening to radio, significantly influenced the attitudes towards nutrition among the adult education instructors. (5) The practices of nutrition among the adult education instructors were significantly influenced by the socioeconomic and demographic variables, namely, sex, caste, educational status, family type, size of the family, experience as an adult education instructor, reading newspapers, listening to radio, viewing film shows and viewing television. (6) The three dependent variables, namely, knowledge, attitudes and practices were positively and significantly interrelated. Knowledge influenced practices both directly and indirectly as mediated by attitudes concurrently. (7) The multiple correlation between knowledge and the six significant socio-economic and demographic variables—sex, education, age, listening to radio, size of the family and experience as an adult education instructor-put together, was 0.352. These could explain only 12.41% of the variance in knowledge of nutrition. Out of this, 3.38% of the variance was accounted for by sex, 2.79% by education, 1.75% by age, 1.35% by listening to radio, 1.62% by size of the family and 1.52% by experience as an adult education instructor. This indicated that there was a differential contribution by these variables to the prediction of knowledge on nutrition. The remaining ten variables did not significantly contribute to the prediction of nutrition knowledge. (8) Out of 16 socio-economic and demographic variables, only five variables contributed significantly to the prediction of 'attitudes toward nutrition' and these were education, size of the family, age, occupation and annual income of the family. (9) The six variables, namely, education, sex, newspaper reading, type of the family, experience as an adult education instructor, and the size of the family turned out to be significant predictors of the practices of nutrition. [PVD 0119]

Tiwari, R.H. 1989. Physical education as expressed in ancient Krishna literature. Ph.D., Phy. Edu. Nagpur Univ.

Problem: This study examines the Krishna literature for physical education contents.

Objectives: (i) To probe into the Krishna literature for the narration of physical education and identify the same in educational programmes, (ii) to highlight the characteristics and find the nature of body, mind, intellect and soul, their relationship and their physical development, (iii) to explain the role of karma in the field of sports and the superiority of a person due to the importance of non-attachment towards karma and due to the principle of self-religion, and (iv) to study the initiation of the process of personality development through yoga, recreation and sports for the achievement of health, strength and efficiency.

Methodology: The study reviewed the Mahabharata, Bhagawad Geeta, Hariwansh, Vishnupuran, Vedas, Upanishads, and ancient Krishna literature, apart from the thoughts expressed by modern writers on the Krishna literature.

Major Findings: (1) The ancient Indians participated in yoga, recreation and sports because it helped them to achieve the skill in sports, general efficiency, and also strength and good health. These further helped in their personality development. (2) Yoga helped them in achieving physical and mental health, will-power and skill in karma which were fortified by pleasure-giving activities (Vihar) within limits. [GPK 1589]

Upadhyay, Basant. 1990. Development of literacy and post-literacy material on health for illiterates and neo-literates. Ph.D., Edu. Agra: Dayalbagh Educational Institute.

Problem: The researcher developed material on health education for illiterates and neoliterates and evaluated their suitability.

Objectives: (i) To develop instructional material on health for illiterates, (ii) to develop instructional material on health for neo-literates, and (iii) to evaluate the suitability of the developed material.

Methodology: The sample comprised three different groups covering illiterates and neoliterates. The relevant data were collected using interview schedules. The collected data were treated qualitatively.

Major Findings: (1) The instructional material developed included six titles under the 'Story Telling' strategy, three titles under the 'Discussions' strategy, three titles under the 'Folk-Songs' strategy, three titles under the 'Talks' strategy, two titles under the 'Drama' strategy and one title under the 'Poem' strategy. (2) On a similar pattern, auto-instructional material was developed for neo-literates in the form of booklets, games, flash-cards, posters, etc. [GDST 0876]

Verghese, Mary. 1991. A study of the health status of primary school pupils and its influence on achievement for framing a school health programme. Ph.D., Edu. Univ. of Kerala.

Problem: The study assesses the health status and identifies the major health problems of primary school children.

Objectives: (i) To study the relationship between the health status and the achievement of primary school pupils, (ii) to investigate the influence of intelligence on the relationship between health status and achievement of primary school pupils, (iii) to investigate the influence of sex on the relationship between health status and achievement of primary school pupils, (iv) to investigate the influence of standards on the relationship between health status and achievement, and (v) to offer suggestions for the school health programme.

Methodology: Primary school children (boys and girls) studying in Standards I, II, III and IV comprised the sample. The tools used included physical examination and check-list, interviews, observation schedule, Mankin Test of Intelligence and the marks scored in the examination formed the index of academic achievement. The collected data were treated using percentage, mean, SD, chi-square and ANOVA.

Major Findings: (1) The pupils were classified into five categories based on their health status. (2) The largest percentage of pupils fell into the good health category. (3) Boys and girls did not show any difference in terms of distribution among health status categories. (4) There was significant association between health status and achievement for the total group, boys and girls and Standards I, II, III and IV. (5) There was no relationship between health status and intelligence for the total sample, boys and girls and Standards I, II, III, and IV. (6) There was a positive and significant relationship between intelligence and achievement for three out of the five health status categories. (7) Over fifty per cent of primary school children suffered from nutritional deficiency. [VR 1720]

Also See

Amanda, Sister M. 1991. A study of intelligence and achievement of children in relation to infant feeding practices and nutrition. Ph.D., Home Sc. Patna Univ. [RPSi 0663] (See in Chapter 15.)

Deshmukh, A.L. 1991. Science education as a means of social change with special respect to health and hygienic habits. Ph.D., Edu. *Univ. of Poona*. [KC 0082] (See in Chapter 19.)

Khadse, Indira B. 1992. A comparative study of physical, language and social development of primary school-going

children. Ph.D., Home Sc. Nagpur Univ. [GPK 1590] (See in Chapter 15.)

Mann, Raghbir Singh. 1992. A comparison of selected physical and physiological abilities of American and Indian students in the age-group of 10-16 years. Ph.D., Edu. Punjabi Univ. [AK 1718] (See in Chapter 34.)

Ray, Prativa. 1990. A study of students' attitude towards studies and health as related to their scholastic achievement.

M. Phil., Edu. Univ. of Poona. [LHB 0074]
See in Chapter 38.)

Sawarkar, N.B. 1991. An analytical study of the inter-relationships, some anthropometric measurements, personality correlates and athletic achievements of students. Ph.D., Edu. Nagpur Univ. [GPK 1623] (See in Chapter 6.)

Sharma, Archana.(a). 1989. An experimental study of psychomotor performance and

reminiscence as determined by personality, intelligence, sex and practice. Ph.D., Psy. Panjab Univ. [JNJ 0267]

Usha, P. 1990. Preparing and evaluating selfinstructional film-strips on nutrition education for B.Ed. students. Ph.D., Edu. Univ. of Madras. [DRG 0095] (See in Chapter 23.)