Chapter II

REVIEW OF RELATED LITERATURE

Sincere efforts have been made by the researcher to locate literature related to this study. The relevant studies found from various sources, which the researcher has come across are cited below.

**Elliott (2008)** conduct a study on the effect of teachers’ attitude toward inclusion on the practice and success levels of children with and without disabilities in physical education. The purpose of this study was to ascertain the relationship between teachers’ attitudes toward the inclusion of children with mild to moderate mental disabilities in physical education settings and the amount of practice attempts performed and the levels of success attained by these students compared to their peers without disabilities. The findings suggested a relationship between teacher attitude toward inclusion and teacher effectiveness. Teachers with a positive attitude toward inclusion provided all of their students with significantly more practice attempts, at a higher level of success.


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motivation. Lincoln, NE: University of Nebraska Press]) in an “at-risk” minority youth sample, (ii) exploring the relationship between motivation and physical activity behavior and attitudes, and (iii) assessing autonomy-support for physical activity from two social agents. A field cross-sectional design, including an assessment of physical activity over 4 days using pedometers. Complete data were obtained from 237 predominantly low socioeconomic Hispanic 5th–8th grade students (M age=12.11 years; SD=1.21) from an elementary school located in the southwestern region of the United States of America. Four days of physical activity data, height and weight measurements, and responses to a multi-section inventory were collected. A model of hypothesized relationships among the study variables was examined using structural equation modeling. The proposed model demonstrated a very good fit to the data [Satorra-Bentler $\chi^2$ (24) =46.88, p<.01; CFI=.94; IFI=.95; SRMR=.052]. Supporting the study hypotheses, the model showed that students who perceived autonomy-support toward physical activity to be promoted by their teachers and their parents experienced greater levels of need satisfaction variables (viz., autonomy, competence, and relatedness). In turn, the satisfaction of these psychological needs positively predicted autonomous motivation towards physical activity. Autonomous motivation positively predicted greater levels of (i) physical activity and (ii) positive attitudes towards physical activity. Body Mass Index (BMI) was found to be a negative predictor of physical activity. Collectively, the results of the present work provide support for SDT and the application of the framework to enhance our understanding of motivational processes as they relate to physical activity within “at-risk” minority youth.
Kocak and Hurmeric (2006)\(^{21}\) studied on Attitudes toward physical education classes of primary school students in Turkey. The purposes of this study was to report an investigation of attitudes toward physical education in a sample of primary school students and examine the predictive influence of students' sex, grades in physical education classes, and parents' education and socioeconomic status on students' attitudes. Participants, 963 (474 girls and 489 boys) primary school students from Grades 6 (12.7%), 7 (10.3%) and 8 (77%), completed the Wear Attitude Inventory. Analysis indicated students had positive scores on General Attitudes rather than on Social, Emotional, and Physical Attitudes. In addition, girls (M = 32.6, SD = 3.9) had more positive General Attitudes than boys (M = 32.0, SD = 4.6). Also, students' grades in physical education classes were statistically significantly related to their Attitudes toward physical education (Wilks lambda, F1,1110 = 2.88, p < .05). However, parents' education and socioeconomic status were not. One may infer that ways of encouraging more favorable attitudes might be planned.

Rikarda and Banvillea (2006)\(^{22}\) High school student attitudes about physical education. This study examined attitudes of high school students toward fitness and sports activities taught in physical education, and the perceived effectiveness of their physical education curriculum for improving their fitness and skill levels. Students from six high schools and 17 intact physical education classes agreed to participate. Data were collected using a questionnaire completed by 515 students, 159 of whom participated in focus group interviews. Results indicated student preference for a wider variety in sport and fitness activities, an increase in level of challenge in physical education classes, and an increase in student motivation for participating in activities.


outside of school. Student attitudes were accepting or tolerant of participation in fitness activities due to known health benefits. Most students liked physical education class that included some form of game play. In addition, they stressed the need for adding interesting activities that included active participation while having fun. Student recommendations were included strategies for improving instruction and for grouping students by skill levels for appropriate challenge.

Christodoulou et al. (2005) studied on Attitudes towards exercise and physical activity behaviours in Greek schoolchildren after a yearlong health education intervention.

Objective: To examine the short term effects of a health education programme on Greek primary schoolchildren

Methods: The school based intervention programme was applied to 29 children in the 6th grade of the 2nd Primary School of AgiosStefanos (~12 000 inhabitants); 49 pupils from the 1st Primary School constituted the control group. To assess the effectiveness of the intervention, attitude and behavioural variables were measured before and after the intervention.

Results: After adjustment for initial differences in the assessed variables, pupils who took part in the intervention had more positive attitudes towards physical activity than the control group and scored significantly more highly on their intention to participate in physical activity. Moreover, pupils in the intervention group reported more hours/week spent in organised physical activities than pupils in the control group (mean (SD) 3.54 (0.32) v 2.54 (0.26), p<0.020). Finally, a higher proportion of pupils

in the intervention classes matched the recommendations of 60 minutes of moderate to vigorous physical activity daily (77.4% v 55.1%, p<0.043).

Conclusions: Within the limitations of the study, the data shown that school health education programmes had the potential to slow the age related decline in physical activity and help pupils establish lifelong, healthy physical activity patterns. Promoting healthy habits and physical activity behaviours during childhood might be prevented some of the leading causes of morbidity and mortality in the Greek population, and also decreased direct healthcare costs and improved quality of life.

**Trudeau and Shephard (2005)** investigated on Contribution of School Programmes to Physical Activity Levels and Attitudes in Children and Adults. Although children and youth formed the most active segments of the population in developed societies, there was a marked trend toward an increase in sedentary lifestyle among school-age children. The purpose of this review was to analyse the effects of school physical education (PE) programmes on: (i) the physical activity (PA) levels of participants as children and adults; and (ii) attitudes toward PE and PA in the same groups. Based on the literature analysed, it was suggested that a sufficient quantity of a quality PE programme could contributed significantly to the overall amount of moderate-to-intense PA of the school-age child. Schools also had the potential to influence the habitual PA of children by encouraging increased participation in extracurricular sports activities, by favouring active commuting to school and by providing exercise equipment and supervision for youth in their neighbourhoods. Most young children had a very positive attitude towards PE. However, as they grew older, their perception of PE as a positive experience seemed to

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become more ambiguous. From the few studies available, it seemed likely that quality PE programmes help to maintain initial positive perceptions. Future research should be addressed factors influencing the change of perceptions as a child mature. In addition to offering a quality PE programme, schools should be ensured that the total weekly amount of PE is sufficient not only to maintain but also to enhanced a child’s physical fitness. More research is needed to determine the ability of school PE programmes to influence PA behaviour in adult life and to evaluated strategies that have made optimal use of the curricular time allocated to PE.

Hutzler et al. (2005) studied on physical education students’ attitudes and self-efficacy towards the participation of children with special needs in regular classes. The purpose of the present study was to investigate the relationship between personal variables of physical education students and their attitudes towards participation of children with disabilities and self-efficacy (SE) in teaching students with disabilities in regular classes. A total 153 PE majors (95 females and 58 males) participated in the study. A 15-item attitude instrument and a 15-item SE instrument concerning dilemmas during educational tasks were administered as a part of the didactic assignments. Factor analysis revealed one challenge and two threat factors in the attitude instrument. The statistical analysis revealed significant effects on attitudes to gender (females higher than males) and years in college (advanced students higher than novices). Significant effects on SE were found in the coursework, previous experience and years in college variables. SE was inversely related to both threat factors of the attitude instrument ($r = -0.42$ and $-0.43$ respectively).

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Morgan et. al. (2005) conducted a study on the Effects of different teaching styles on the teacher behaviours that influence motivational climate and pupils' motivation in physical education. This study investigated the effects of different teaching styles on the teaching behaviours that influence motivational climate and pupils' cognitive and affective responses in physical education. Four (two male, two female) initial teacher education (ITE) students and 92 pupils (47 boys, 45 girls), from two schools in the UK, participated in the study. The student teachers were filmed teaching three lessons each, adopting a different teaching style for each. The teaching styles (command/practice, reciprocal and guided discovery) were selected from Mosston and Ashworth's (2002) spectrum. The teaching behaviours were measured using a computer-coding system devised for Ames's guidelines on how to create a mastery climate. Focus groups were conducted to examine the pupils' cognitive and affective responses. Results revealed that the reciprocal and guided discovery styles resulted in more mastery and less performance-focused teaching behaviours and more adaptive cognitive and affective responses than the command/practice style.

Koca and Demirhan (2004) conducted a study, an examination of high school students’ attitudes toward physical education with regard to sex and sport participation. This study assessed attitudes of high school students toward physical education with regard to sex and sport participation. A total of 440 sport participants (175 girls and 265 boys) and of 427 non-sport participants (227 girls and 200 boys), all of whom were 15 yr. old, voluntarily participated. The Attitudes Toward Physical Education Scale was administered to assess participants’ attitudes toward physical

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education. The results of $2 \times 2$ (Sex × Sports Participation) analysis of variance indicated a significant difference in attitudes toward physical education between sport participants and non-sport participants, with the former scored higher, and a difference between boys and girls, with boys scored higher. However, there was no significant interaction between sex and sports participation on attitudes toward physical education. In general, sport participants had more favorable Attitudes Toward Physical Education scores than non-sport participants, and high school boys scored significantly higher than girls. There was a significant difference in Attitudes toward Physical Education scores between female and male high school students, with boys having more favorable attitude scores.

Digelidis et al. (2003) studied on a one-year intervention in 7th grade physical education classes aimed to change motivational climate and attitudes towards exercise. Objectives: To assess the effects of a year-long intervention in Greek junior high school physical education on motivational climate, goal orientations and attitudes towards exercise and healthy diet, One-year pre-post experimental trial. Eighty-eight daily lessons were aimed to facilitate task-involvement and developed with 262 students in an intervention group and 521 acted as controlled. All were at the first year of junior high school (7th grade). The intervention was assessed through questionnaires at the beginning and end of the school year and 10 months after the end of the intervention. Participants completed the measures of motivational climate, goal orientations and attitudes. Confirmatory factor was analysed, reliability and correlation were also analysed and supported the psychometric properties of the questionnaires. Covariance analysis results revealed that, after adjusting for initial differences on the

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assessed constructed, students who took part in the intervention, compared with the controlled group: (1) had more positive attitudes towards exercise and healthy eating, (2) had lower ego and higher task orientation scores, and (3) perceived that their teacher gave more emphasis on task-involvement and less emphasis on ego-involvement. Physical educators could have created a positive motivational climate facilitating students’ task orientation and attitudes towards exercise.

Standage et al. (2003) investigated on a model of contextual motivation in physical education: Used constructs from self-determination and achievement goal theories to predict physical activity intentions. Assessed the motivational responses of 328 secondary school students, this study examined a model of student motivation in physical education that incorporated constructs from achievement goal and self-determination theories. The focus was on the prediction of students' intention to partake in physical activity outside of physical education. Structural equation modeling analysis supported a model in which an autonomy-supportive climate, and to a lesser extent perceptions of a mastery climate, positively impacted hypothesized mediating variables (i.e., autonomy, competence, relatedness) to foster self-determined motivation. Self-determined motivation was found to be positively predicted, whereas motivation was negatively predicted of leisure-time physical activity intentions.

Trost et al. (2002) conducted a study on Determinants of Physical Activity in Middle School Children to evaluate the theory of reasoned action (TRA) and planned behavior (TPB) in predicting moderate-to-vigorous physical activity (MVPA) in sixth-

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grade youth. **Method:** One hundred ninety-eight students completed a questionnaire measuring attitudes, subjective norms, perceived behavioral control, and intentions to be active. MVPA was measured using the CSA 7,164 accelerometer. **Results:** Although, it was demonstrated an acceptable fit, the TRA and TPB accounted for only a small percentage of the variance in MVPA. TPB was supported and the addition of controlled perceptions to the reasoned action model was added to the prediction of intentions and MVPA. **Conclusion:** Within our sample of sixth graders, the utility of the TRA or TPB as a framework for activity interventions was appeared to be limited.

**Williams and Bedward (2001)** have studied on Gender, Culture and the Generation Gap: Student and Teacher Perceptions of Aspects of National Curriculum of Physical Education. This paper focuses upon the physical education experiences of girls in Key Stages 3 and 4, drawing upon data from a qualitative study based in three contrasting secondary comprehensive schools in England. We suggest that stereotypical assumptions about the physical activity interests of particular ethnic groups and about girls in general represent an oversimplification of complex issues. We discuss the intersection of race and gender within the experiences of a subsample of pupils and conclude that several issues commonly raised from the perspective of pupil culture are, equally, gender issues relevant to some girls from all ethnic groups. We suggest that diversity within particular cultural groups tends to be underestimated and that a physical education curriculum which purports to support inclusion should address this important issue. Finally, we suggest that inconsistencies and conflicts between teacher and student views, while reflecting the significant changes in attitudes

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towards gender issues which have characterised educational practice since the 1970s, currently limit opportunities for girls from all ethnic groups in some schools.

**Marshall and Hardman (2000)**[^32] studied on the State and Status of Physical Education in Schools in International Context. Against a background of perceived threats to physical education, an investigative world-widesurvey of the state and status of physical education in schools funded by the International Olympic Committee was carried out in 1998–99. The survey findings were based on data collated from a globally administered semi-structured questionnaire and an extensive literature survey, revealed that school physical education is in a perilous position in all continental regions of the world. Specifically, the article addressed issues of legal status and actual implementation, restricted or decreased curriculum time allocation, subject status and attitudes of headteachers, other teachers and parents, inadequacies in financial, material and human resources and teacher preparation, curriculum trends, as well as skepticism about the subject’s future. Concluding comments were eluded to the main sources of concern and international efforts to sustained physical education in schools in the next millennium.

**Maras and Brown (2000)**[^33] have studied the effects of different forms of school contact on children's attitudes toward disabled and non-disabled peers. There have been fluctuations in research interest into the inclusion of children with disabilities in mainstream schools over the last twenty years. It is still not clear what methods, practices and types of contact are most likely to promote positive attitudes in children toward disabled peers and disability generally.

Aims: - To consider two theoretical models of inter-group contact, both claiming to identify precursors for generalised attitude change, in relation to the attitudes of non-disabled children toward disabled peers as a function of different classroom contact.

Sample: - Participants are 256 non-disabled school children aged 5-11 years (128 girls and 128 boys). Methods: Measures of socio-metric preference and the evaluation of psychological and physical attributes are used to ascertain children's perceptions of known and unknown peers with disabilities.

Results: - A relationship is found between the type of contact the children have with disabled peers, and their perceptions of psychological and physical attributes (stereotypes) of groups of unknown disabled and non-disabled peers.

Conclusions: - Results show generalization of stereotypic attitude/judgments from one type of disability to another as a consequence of the two types of contact situation. Findings have important implications for integrating disabled children into mainstream.

Silverman and Subramaniam (1999)\(^{34}\) have studied on Student attitude toward physical education and physical activity: a review of measurement issues and outcomes. This paper reviews the literature on student attitude in physical education. First, an overview of the concept of attitude is presented followed by a discussion of issues related to attitude measurement. Both quantitative and qualitative tools are discussed with a particular focus on developing an instrument that has the properties of reliability and validity. The third major section of the paper presents an overview of the results of attitude research in physical education. The physical educator, parental

influence, curricular content, gender, age and grade level, marginality of physical education, and student skill level are all issues that have been investigated in the past. Finally, the paper concludes with implications for research in this area.

**Pritchard (1998)**\(^{35}\) has studied on attitudes towards physical education in England - an investigation among parents, pupils and teachers. Assesses how parents, students, and teachers in secondary schools in England perceive physical education needs. Includes eight economic planning regions in England, and focuses on ten rural and ten urban secondary schools in each region. Students (n=277) in the fifth year of secondary education, teachers (n=296) who contribute to the physical education program, and parents of the students (n=269) respond to a questionnaire. Finds that the total sample mainly values physical education for the improvement of personal health and fitness, and for the development of good sporting behaviour. All subjects indicate that the main aim of physical education should be to engender strengths of interest, enjoyment, and involvement in physical activity, with opportunities for the potentially physically able to achieve success, skillfulness and superiority in sport.

**Kimiecika and Horna (1998)**\(^{36}\) studied on Parental Beliefs and Children's Moderate-to-Vigorous Physical Activity. The present study was guided by the Family Influence Model to examine the role of parental beliefs in their children's moderate-to-vigorous physical activity (MVPA). The specific purposes were to (1) examined the nature of a parental belief system that may be relevant to children's MVPA participation, (2) determined if parental beliefs regarding their children's MVPA were gender related, (3) examined the relationship between parents' exercise behavior and children's MVPA participation, and (4) investigated the strength of the relationship


between parental beliefs and children's self-reported MVPA. The participants for this study were included 81 children (26 girls and 55 boys) between the ages of 11 and 15 years and their parents (n = 142). Significant findings were: (1) descriptive evidence of a parental belief system for children's MVPA existed, (2) mothers and fathers differed in their MVPA-related beliefs for their child, (3) no relationship was found between parents' exercise behavior and children's MVPA participation, and (4) parental beliefs relating to their children, especially perceptions of competence and a task orientation, were significantly related to the amount of children's MVPA participation. These findings supported the basic tenets of the Family Influence Model and suggest that parental beliefs should be taken into consideration to better understand the psychosocial process underlying children's participation in fitness-oriented physical activity.

Kohl and Hobbs (1998)\(^{37}\) have studied on Development of Physical Activity Behaviors among Children and Adolescents. Physical activity is a key component of energy balance and is promoted in children and adolescents as a lifelong positive health behavior. Understanding the potential behavioral determinants necessitates understanding influences from three fundamental areas: 1) physiologic and developmental factors, 2) environmental factors, and 3) psychological, social, and demographic factors. The literature to date has generally investigated potential predictors of physical activity in children and adolescents in each of these three general areas, although existing data rely largely on cross-sectional studies in which it is difficult to distinguish a determinant from a correlate. In all likelihood, aspects of each of these three areas interact in a multidimensional way to influence physical activity in

youth. This article reviews evidence of potential determinants of physical activity in children and adolescents and provides recommendations for future work.

**Hagger et al. (1997)** studied on Children's Physical Activity Levels and Attitudes Towards Physical Activity. This study investigated the relationship between attitude towards physical activity and physical activity behaviour and the influence of gender and season on physical activity level in 45 primary school children, aged 9 to 11 years. Attitudes towards physical activity were assessed using two different theoretical approaches: the children's attitudes towards physical activity (CATPA) inventory and the theory of reasoned action (TRA) questionnaire. Physical activity behaviour was measured using Cale's (1994) self-report measure of physical activity. Approximately 50% of the children were categorised as 'inactive' based on cut-off points developed by Blair (1984). A 2 x 2 (gender x season) factorial analysis of variance showed that children participated in more moderate physical activity in the summer than in the winter (F(1,44) = 6.29, p<.05) but there were no gender differences in physical activity levels. Descriptive statistics for the CATPA inventory showed that children generally exhibited positive attitudes towards physical activity. Mann-Whitney U tests for two independent samples revealed significant differences between the high-active and low-active children for the catharsis, health and fitness, vertigo and aesthetic sub domains from the CATPA inventory (p<.05). None of the TRA variables showed any significant differences for activity level. Present results suggested that some attitude variables from the CATPA inventory were differed according to children's physical activity levels and thereby emphasized the need for physical

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**38**Martin Hagger, Lorraine Cale, Len Almond & ArndKrüger, (1997). Children's Physical Activity Levels and Attitudes Towards Physical Activity. European *Physical Education Review; 3*(2) :
educators to foster positive attitudes towards physical activity in order to encourage children to adopt and maintain healthy and active lifestyles.

Block and Rizzo (1995) studied on attitudes and attributes of physical educators associated with teaching individuals with severe and profound disabilities. Assessed the relationship between attitudes and selected attributes of 150 public school physical educators toward teaching students with severe and profound disabilities in regular classes from suburban school districts in a mid-western state were sent the Physical Educators' Attitude Toward Teaching Individuals with Disabilities—III (PEATID-III). Data showed that physical educators were undecided about teaching students with severe disabilities and disagreed with the teaching of students with profound disabilities in regular classes. Results showed that as the quality of teaching experiences improved and adapted physical education course work increased, attitudes toward teaching students with severe disabilities were more favorable. Favorable attitudes toward teaching students with profound disabilities were associated with an increase of both course work in special education and perceived teacher competence.

Treasurea & Roberts b (1995) have studied on Applications of Achievement Goal Theory to Physical Education: Implications for Enhancing Motivation. Given the widespread concern regarding the motivation of students, the paucity of research in education on motivation enhancement is surprising. Recent research from an achievement goal perspective, however, has begun to address this issue. The purpose of this paper is to provide a review of the basic tenets of achievement goal theory and

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to analyze the research that has been conducted in physical education that focuses extensively on instructional practices and strategies that may improve the quality of school-age children's motivation. The paper concludes by commenting on the potential utility of adopting an achievement goal approach to understand and enhance motivation in the physical education context.

Anderssena and Wolda (1992) conducted a research on Parental and Peer Influences on Leisure-Time Physical Activity in Young Adolescents. Influence from parents and friends on adolescents' self-reported level of leisure-time physical activity was examined through measures of (a) perceived leisure-time physical activity of parents and best friend, (b) perceived direct support for physical activity from parents and friends, (c) directed help from parents in exercising vigorously, and (d) perceived value of physical activity of parents and friends. The present analysis included 904 students in western Norway (M age 13.3 years, SD 0.3) who took part in a health behavior survey, which included questions regarding physical activity. Students completed a confidential questionnaire at school all four measures of influence were positively related to students' activity levels. None of the examined measures was clearly stronger than the other. Parental and peer physical activity level and parental and peer support for physical activity seemed to influence the reported physical activity level of the respondents. The findings indicated that, by serving as models and supporters, significant others have an important impact in promoting physical activity in young adolescents.

Granta (1992) has studied on Integrating Sport In to the Physical Education Curriculum in New Zealand Secondary Schools. Schools are important in shaping the values and beliefs of young people. One value claimed to be important to New Zealanders is participating in sport. New Zealand has an impressive international sporting record for a country with a small population, and many forms of recreation and sport are deemed to be socially and culturally significant and positive contributors to society. If done well, physical education is one medium that can positively impact values associated with participation in recreation and sport. This essay paints a portrait of physical education in New Zealand secondary schools and comments on the potential for including sports education in the curriculum.

Werschet. al. (1992) studied on Post-Primary School Pupils' Interest in Physical Education: Age and Gender Differences. Interest in Physical Education (PE) was studied in 3,344 11 to 18 year-old school children. Five aspects of educational importance (PE connotation, PE status, PE teacher, PE curriculum, and adolescent disturbances in relation to the PE lesson) were identified, and examined in relation to pupils' interest. For the younger age groups girls' interest in PE was significantly higher than that of the boys, while after the age of 14 the reverse was the case. The status of PE as a school subject was found to be the most important variable for interest in PE. The contribution of the PE teacher to pupils' level of interest was the least important of the factors examined. The results were discussed in terms of the


differing importance for boys and girls of sport in social status systems for peer popularity. Suggestions for changes to PE lessons were offered.

Luke and Sinclair (1991) conducted a study: Gender Differences in Adolescents’ Attitudes Toward School Physical Education. The purpose of this study was to identify and examine the potential determinants of male and female adolescents' attitudes toward school physical education. Students (N=485), randomly selected from four large metropolitan schools, were asked to comment on their school physical education experience from kindergarten through Grade 10. A systematic content analysis was used to categorize these responses. Three main questions were addressed:

What factors in the K-10 physical education experience of male/female students contribute to the development of positive/negative attitudes toward physical education? Are these factors different for males and females? Are they different for students electing to take school physical education? Five main determinants of attitude were identified in ranked order: curriculum content, teacher behavior, class atmosphere, student self-perceptions, and facilities. Overall, male and female students were identified the same determinants in the same order of priority.

Birtwistle and Brodie (1991) studied on Children's attitudes towards activity and perceptions of physical education. The attitudes towards activity (CATPA) and perceptions of physical education of a sample of 291 secondary and 316 primary boys and girls were investigated with respect to health promotion. Using analysis of variance techniques, significant differences between boys' and girls' attitudes were found in both the secondary and primary samples. Girls had significantly more positive attitudes towards physical activity than boys, but the data yielded no differences in

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attitudes between the socio-economic levels. The influence of CATPA scores of the literacy sets variable was significant, but the numeracy sets variable yielded non-significant results. This result highlighted the implications of internal school organization for health promotion and children's affective development. MANOVA was used to analyse gender differences in CAPTA subdomain scores. Girls from both samples were found to have significantly more positive attitudes than boys in the aesthetic domain. Differences were also found in social growth and vertigo scores. All groups ranked health and fitness objectives highly, with a similar pattern of pupil perceptions of physical education emerging from both samples.

Moore et. al.(1991) investigated on Influence of parents' physical activity levels on activity levels of young children. To determine the relationship between activity levels of parents and those of their young children, we monitored physical activity with a mechanical device, the Caltrac accelerometer, in one hundred 4-to 7-year-old children and in 99 of their mothers and 92 of their fathers. During 1 year in the Framingham Children's Study, data were obtained for an average of more than 10 hours per day for 8.6±1.8 days for the children, for 8.3±2.1 days for their mothers, and for 7.7±2.3 days for their fathers. Children of active mothers (average Caltrac accelerometer counts per hour greater than the median) were 2.0 times as likely to be active as children of inactive mothers (95% confidence interval=0.9,4.5); the relative odds ratio of being active for the children of active fathers was 3.5 (95% confidence interval=1.5, 8.3). When both parents were active, the children were 5.8 times as likely to be active (95% confidence interval=1.9, 17.4) as children of two inactive parents. Possible mechanisms for the relationship between parents' and child's activity levels

include the parents' serving as role models, sharing of activities by family members, enhancement and support by active parents of their child's participation in physical activity, and genetically transmitted factors that predispose the child to increased levels of physical activity. MPH

**Stewart and Green (1987)** Parental Attitudes Toward Physical Education. Five hundred and five parents of elementary through secondary school students were surveyed to determine attitudes towards physical education. The questionnaire included positive and negative statements about physical education. Responses indicated that parents were positively disposed toward physical education, favoring focus on fitness, skill, and social development more than cognitive and affective development.

**Godin and Shepherd(1986)** studied on Psychosocial Factors Influencing Intentions to Exercise of Young Students from Grades 7 to 9. The main purpose was to examine the influence of personal attributes and family environment upon the exercise intentions of students in grades 7 to 9. Fishbein's (1967) psychosocial model was applied. This predicts intentions from attitudes and subjective norms. The subjects were 698 students of both sexes attending grades 7 to 9 at two junior high schools in Metro Toronto. The results were not supported Fishbein's concepts that external variables increase the prediction of exercise intentions relative to variables normally included in his model. Attitudes, current physical activity habits, and prior experience of exercise all contributed significantly to explaining the variance in exercise.

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intentions. Nevertheless, over 50% of the total variance in exercise intentions remained unexplained. Since more variance of exercise intentions could be explained in students who had personal experience of physical activity early in childhood, our results were supported the value of early socialization towards physical activity.

**Gottlieb and Baker (1986)**49 investigated a study on the relative influence of health beliefs, parental and peer behaviors and exercise program participation on smoking, alcohol use and physical activity. This research was specified a model for lifestyle health behavior which includes socialization, social environmental and cognitive influences on smoking, alcohol use and exercise. Survey respondent were participants in university conditioning classes, academic health classes and a community fitness program. Of the socialization influences, drinking by both parents was directly related to drinking by females and drinking by the mother to that of males. Physical activity level of the father was associated with the activity of both genders. Parental smoking was not related to that of the respondents. Income was positively correlated with alcohol consumption in both genders and with smoking among women. In the immediate environment, drinking and smoking by male and female friends were directly associated with that of both male and female respondents with congruent gender relationship being strongest. Exercise by male friends was positively associated with activity level for both genders, as was exercise by female friends for women only. For college students, program participation was related to lower alcohol consumption among men only and higher activity level for women only. It was not related to the likelihood of smoking. For cognitive factors, belief in the efficacy of lifestyle change

was inversely related to alcohol consumption for both genders and to smoking for women. Susceptibility to heart disease was associated with a low exercise frequency and smoking, while generalized susceptibility was directly related to activity level and to smoking. Self-control over health was positively related to activity level. With exception, the peer modeling variables had the strongest relationships of any of the model elements in the multivariate analyses. Gender specificity for modeling of behavior was found for peers, but not for parents. These findings suggested that prevention programs incorporate strategies to maximize peer support for healthful behavior and to counteract the effects of unhealthful behavior modeled by peers. Interventions to increase beliefs in the efficacy of lifestyle change to reduce risk were appropriate to encourage behavior change. When the change was underway, discussion of lowered susceptibility as a function of program compliance should reinforce the new behavior.

Aldermana (1970)\(^{50}\) conducted a study on Socio-psychological Assessment of Attitude toward Physical Activity in Champion Athletes. This study examined the attitudes toward physical activity of a certain selected group of male and female championship athletes (N = 136) representing 10 different sports events. An attitude inventory, containing 48 response items, and based on a subdomain conceptual framework developed by Kenyon, was administered to each athlete. Each respondent was required to rate the meaning each subdomain concept had for him with respect to his attitude toward physical activity. This rating was accomplished through a series of eight descriptive semantic differential scales each based on a seven-alternative Liker-type attitude statement format. The six subdomains contained in the inventory were

physical activity as a social experience, as health and fitness, as the pursuit of vertigo, as an aesthetic experience, as catharsis, and as an ascetic experience. Results indicated that the male and female athletes in this study were remarkably similar in their attitudes, that the strongest attitude of the athletes toward physical activity was as an aesthetic experience, and that physical activity as an ascetic experience held the least meaning for the total group.