programme planners is to ensure that a diversity of activities is offered to students. Moreover, this feature is probably more important for mandatory programmes.

Male and female students were found to differ significantly in their perception of derived values. Males were more inclined than females in perceiving Fitness and Transcendence as important values derived from the MPEP. Gender differences in value orientation had been reported in several earlier studies (Avery & Lumpkin, 1987; Chen, 1998; Soudan & Everett, 1981). However, gender differences in this instance is not important as having provided experiences in which both male and female found meaningful. The MPEP had been successful in this aspect.

In sum, this investigation was fruitful in two ways. Firstly, by verifying the success of the MPEP in providing personally meaningful experiences for students, the programme provides an instrumental value from a developmental perspective. Secondly, by identifying the types of personal meaning the students encountered from participating in the MPEP, administrators could plan future programmes accordingly. Although the use of students’ perceptions as feedback on a curriculum is nothing new, the investigators strongly recommend the continued use of the personal meaning approach in programme evaluation.

References
Due to space limitations the references may be asked from the author.

Correlation Between Exercise And Other Health Related Behaviors In Greek Students

Y. Theodorakis (Trikala, Greece), P. Natsis (Trikala, Greece) & A. Papaioannou (Komotini, Greece)

1. Introduction
2. Aims
3. Methods
   3.1 Sample
   3.2 Variables
   3.3 Methods of Analysis
4. Results
5. Discussion
6. Conclusion

1. Introduction
Adolescence exercise improves health in both physical and psychological domain. Regular physical activity has many health benefits, including improving aerobic endurance and muscular strength, promoting weight control, and building mass density (U.S. Department of Health and Human Services, 1996). Physical activity among adolescents is also consistently related to higher levels of self-esteem and self-concept and lower levels of anxiety and stress (Centers of Disease Control and Prevention, 1996).

Health attitudes play an important role as a person approaches adulthood. A major rationale for promoting regular physical activity in children is to facilitate a carryover of healthful habits into adult life (Stucky-Ropp, & Di Lorenzo 1993). Furthermore, over the years there has been a shift in emphasis from hard training to improve fitness scores towards enjoyable participation in physical activity for health benefits (Harris, 1998). According to Shephard
participation in exercise for health reasons is related more with other health related behaviors than participation for other reasons. Adolescence is an important period during which teenagers deal directly with behaviors concerning health. Many health behaviors begin during adolescence, including, among others, patterns of exercise, eating behaviors, sexual activity, smoking and alcohol consumption, illicit drug use, interpersonal violence, and behaviors that cause unintentional injuries, (Santelli, Rosenfeld, DuRant, Dubler, Morreale, English & Rogers, 1995).

Nutrition and exercise are considered as health promoting behaviors. Healthy eating and physical activity during adolescence promote optimal growth, can help prevent immediate health problems, and may prevent long-term chronic diseases (Story & Neumark-Sztainer, 1999). In reverse, behaviors like smoking, drug use and violence are referred as risk for health behaviors that contribute to morbidity and mortality (Muscari, Phillips & Bears, 1997). Engagement in such risk behaviors has the potential to jeopardize the accomplishment of normal development tasks, the fulfillment of societal roles, the achievement of a sense of competence, the acquisition of skills, and the preparation for the transition into adulthood, (Guthrie, Lovelamd-Cherry, Frey, & Dielman, 1994).

Among the factors that determine whether or not an individual practices health behaviors are the cognitive factors. These include perceptions of health risk, potential efficacy of behaviors in influencing this risk, perceived social pressures to perform the behavior, and control over performance of the behavior (Conner & Norman, 1996). The theory of planned behavior (TPB) represents a model developed by social psychologists, which has been quite widely applied to the understanding of a variety of behaviors (Ajzen, 1988, 1991). According to the theory, the proximal determinants of behavior are one’s intention to engage in the behavior, and one’s perceptions of control over the behavior. Intentions represent a person’s motivation in the sense of her or his conscious plan or decision to exert effort to perform the behavior. Perceive behavioral control determines how difficult or easy someone perceives to be the engagement in the behavior, and reflects the resources and opportunities to perform the behavior. Attitude, a function of beliefs about the perceived consequences of the behavior, constitutes a main determinant of intention to engage to the behavior.

2. Aims

Our study examines the correlation of attitudes, intentions, perceived behavioral control, and behavior of exercise with the respective variables of eating fruits, smoking, using drugs, and involving in violence acts as a team fun.

3. Methods

3.1 Sample

The sample consisted of 882 students (329 boys and 553 girls) selected from schools of six different towns, by using stratified sampling method. Their mean age was M= 13.94 (SD= 2.14), and were distributed at three grades: elementary (n= 187), high school (n= 398), and senior high school (n= 297).

3.2 Variables

In classroom settings, students completed reliable scales assessing attitudes, intention, perceived control, and behavior, for each of the five behaviors of the study. Attitude toward behavior was assessed by the mean rating on three bipolar adjectives (e.g., good-bad, useful-of no use, healthy-unhealthy). Seven point scales were used. “I think that exercising, eating fruits, smoking, using drugs, involving in violence acts, during the next two months is ...”. Intention was estimated with the mean score of the responses to three different items: “I intent / I will/ I am determined to exercise, eat fruits, smoke, use drugs/ get involved
in violence acts, during the next two months". Responses to the first item were rated on a 7-point scale from likely to unlikely. A scale with endpoints labeled yes, sure to not at all, was used for the other two items. Perceived Behavioral Control was assessed by two questions. (a) "I can exercise/ eat fruits/ smoke/ use drugs/ get involved in violence acts, during the next two months". Responses rated from likely to unlikely in a 7-point scale. (b) "For me to exercise, eat fruits, smoke, use drugs, get involved in violence acts during the next two months is ...". Responses were rated from easy to difficult on a 7-point scale. Self reported behavior was defined as the frequency in the time period prior to the questionnaire's completion. Behavior was assessed through self-reports regarding the frequency of the examined behaviors within specified periods of time (Likert 6-point scale). In that study, exercise was considered every physical activity lasting for more than 20 minutes.

3.3 Methods of Analysis

Pearson correlation coefficients were calculated to examine the relationship between the variables: attitudes, intention, perceived control, and behavior of exercise and the respective variables of the other four health related behaviors.

4. Results

Results showed that there were significant positive correlations between exercise and eating fruit behavior in all corresponding variables: attitudes r=.364, intentions r=.257, perceived behavioral control r=.235, and the behavior itself r=.191, all significant at p<.001. According to the expectations, there were negative correlations between exercise and smoking in all corresponding variables: attitudes r= -.271, intention r= -.224, in perceived behavior control r= -.235, and behavior r= -.113, all significant at p<.001. Correlations between exercise and the two other behaviors (drug use and violence acts) were significant only for the variable of attitudes. In particular, attitudes for exercise correlated negatively with attitudes for drug use (r= -.269, p<.001), and attitudes for taking part in violence acts as team fun (r= -.118, p<.001). All other correlations between behavior variables were not significant (See Table 1).

Table 1: Correlation between Behavior Variables

<table>
<thead>
<tr>
<th></th>
<th>Attitude for eating fruits</th>
<th>Attitude for smoking</th>
<th>Attitude for drug use</th>
<th>Attitude for team fan violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude for exercise</td>
<td>.364**</td>
<td>-.271**</td>
<td>-.269**</td>
<td>-.181**</td>
</tr>
<tr>
<td>n =876</td>
<td>n =871</td>
<td>n =692</td>
<td>n =876</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Intention for fruits</th>
<th>Intention for smoking</th>
<th>Intention for drug use</th>
<th>Intention for violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention for exercise</td>
<td>.257**</td>
<td>-.224**</td>
<td>-.036</td>
<td>-.018</td>
</tr>
<tr>
<td>n =877</td>
<td>n =876</td>
<td>n =687</td>
<td>n =874</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Control for eating fruits</th>
<th>Control for smoking</th>
<th>Control for drug use</th>
<th>Control for violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control for exercise</td>
<td>.235**</td>
<td>-.239**</td>
<td>-.014</td>
<td>-.008</td>
</tr>
<tr>
<td>n =865</td>
<td>n =867</td>
<td>n =683</td>
<td>n =866</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eating fruits</th>
<th>Smoking</th>
<th>Drug use</th>
<th>Involvement at violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise Behavior</td>
<td>.191**</td>
<td>-.113**</td>
<td>-.038</td>
<td>.058</td>
</tr>
<tr>
<td>n =848</td>
<td>n =872</td>
<td>n =693</td>
<td>n =873</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant for p<.001
* Correlation is significant for p<.05
5. Discussion

In our study, predisposition factors of exercise and eating fruits behavior are related, in a similar pattern of change. Similarly, Johanson, Thelle, Solvoll, Bjorneboe, and Drevon, (1999), found that people exercising regularly, had higher intakes of fruits than subjects exercising less than once weekly, while adolescents who perceived themselves as exercisers consumed fruits and vegetables more constantly than non-exercisers (Georgiou, Betts, Hoos & Glenn 1996). However, attitudes, intentions, and perceived behavior control, were more strongly correlated between exercise and eating fruits than behaviors themselves, showing common characteristics in predispositions for these two behaviors.

Exercise behavior was related negatively to smoking, in agreement with previous studies involving adolescents (Marti, Abelin, Minder & Vader, 1988; Marti & Vartianen 1989; Winnail, Valois, McKeown, Saunders, & Pate, 1995). Attitudes, perceived behavior control, and intentions for exercise and smoking were more strongly correlated than the behaviors themselves.

Exercise correlated negatively with drug use only in the variable of attitudes to an extent similar to that of smoking. Similarly a significant, even though smaller, negative correlation was revealed between exercise and participation in violence acts as a team fun. It seems that attitudes reflect behavioral tendencies independently from the correlation of the behaviors themselves.

6. Conclusion

It seems, that the promotion of exercise in adolescents could help health education. An orientation of physical education towards the formation of positive attitudes, intentions, and perceived control for exercise could help promoting the adoption of healthy behaviors and abstinence from unhealthy behaviors. Under this perspective, there is a need for the implementation of appealing programs of physical education, that take into account the needs of adolescents, their interests and aptness and their individual capabilities.

References


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**Differences in Spending Summer Holidays of Slovenian Children and Youth in different Periods of Schooling**

G. Jurak, M. Kovac & J. Strel (Ljubljana, Slovenia)

1. Introduction
2. Methods
   2.1 Tested Individuals
   2.2 Variables
   2.3 Methods of Data Processing
3. Results
4. Conclusions

1. Introduction

The rhythm of modern live dictates intensive schoolwork of children and youth, therefore summer holidays are very important for relaxation and preparation for the new school term. Thus children and young people should in that time do what they are interested in the most. Different ways of spending holiday time nowadays also reflects the influences of civilised achievements and modern society, which are various and unpredictable, negative and positive. Intensive development of industrial society and pluralist civilisation inhibit strong negative pedagogical and functional effects. The social influences and new, educationally not yet covered factors of socialisation of young people in modern societies of plenty and hedonism are causing several educational problems. The decrease of sports participation after the age of 14 (Wenkel, Mummery, 1996; Laakso, Telama & Yang, 1996; Brettscheider & Sack, 1996;