Protective factors for youth considered at risk of criminal behaviour: does participation in extracurricular activities help?

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ABSTRACT

Background There is a lack of research investigating the potential protective effect of participation in extracurricular activities on youth who are at risk of engaging in delinquent activity.

Aim This study examined the potential for participation in extracurricular activities to act as a protective factor for youth deemed at risk of engaging in delinquent activity.

Method One hundred and sixty-nine secondary students from Glasgow, Scotland completed two questionnaires (the Youth Self-Report and an additional information sheet) requesting information about their participation in extracurricular and delinquent activities as well as their possible risk factors. Activities included sports, non-sports (hobbies and games), current activities (youth clubs and other organisations) and previous involvement in activities. Risk factors included residing in a broken home, having four or more siblings, academic failure and lacking a non-parental very important person. Delinquent activities included rule-breaking and aggressive behaviours.

Results Independent samples t-tests found that females participated in significantly more non-sports and previous activities than males and that males participated in significantly more rule-breaking behaviour than females. Hierarchical multiple regression analyses found that gender and participation in sports were strong predictors of rule-breaking behaviour. A significant positive correlation was found between participation in sports and involvement in aggressive behaviour.

Conclusion The results suggest that participation in extracurricular activities does not act as a protective factor for youth, regardless of whether or not they are considered to be at risk of engaging in delinquent activity. The significant correlation found between participation in sports and involvement in aggressive behaviour suggests that youth participation in sports may act as a risk factor.
Introduction

Though a significant body of research has investigated the benefits of youth involvement in extracurricular activities, little has been done to determine the potential protective effect of such activities for youth who are considered at risk of engaging in delinquent behaviour. Protective factors, defined as 'factors expected to decrease problem behaviour for all youth or for those at high risk' (Beam et al., 2002, p. 344), are important factors for consideration as they have the potential to improve individuals' chances of living crime-free lives. Should extracurricular activities demonstrate a protective effect for youth at risk of delinquency, this knowledge would allow for parents and educators to encourage children to participate in such activities beginning at a young age, thereby helping to reduce each child's risk of future involvement in criminal behaviour. The following discussion includes a review of pathways to criminal behaviour, risk factors, protective factors and extracurricular activities.

Pathways to criminal behaviour

When addressing pathways leading to criminal behaviour, two taxonomies of offenders, discussed by Moffitt (1993), can be considered: adolescence-limited and life-course-persistent. Moffitt (1993) acknowledged two different types of antisocial people: those who continuously engage in criminal activity (life-course-persistent) and those who become involved in criminal activity for a temporary period of time (adolescence-limited). Life-course-persistent offenders are said to lack development in prosocial behaviour and academic skills whereas adolescence-limited offenders develop such behaviour and skills (Moffitt, 1993). Entering the criminal justice system at an early age generally leads to an increase in future offending (Moffitt, 1993; Farrington, 1996c; McGuire, 1996); therefore, through determining and implementing prevention methods for both groups, levels of crime may be decreased.

Research involving adolescent problem behaviour is an important area of deliberation and when investigating such behaviour it is useful to acknowledge the various pathways to criminal behaviour that have been researched throughout the years. One significant trend in juvenile antisocial behaviour is that participation in criminal behaviour is most prevalent during the teenage years (Lösel, 1994; Petersen and Leffert, 1995; Smith, 1995; Farrington, 1996b; Rutter et al., 1998). Research regarding the reasons for such a trend is necessary for reducing the potential for young people to become involved in delinquent activity. Researchers investigating these trends can aid society in determining various catalysts of delinquent activity and also improve the search for methods of prevention.
Gender differences that exist with regard to adolescents' involvement in delinquent activity are also an important area of consideration. For one, the peak age of offending for males is 18 years of age and for females it is 15 years (Rutter et al., 1998). The peak ages can change, however, depending on the source; for example, self-report data have suggested peak ages of 21 years for males and 18 years for females (Rutter et al., 1998). Males and females also differ in their amount of offending and types of offences committed. Throughout many countries, males tend to engage in more criminal activity than females (Blackburn, 1993; Smith, 1995; Asquith et al., 1998; Rutter et al., 1998; Loucks et al., 2000). According to Farrington (1996b), explanations for gender differences in offending have included 'different socialization methods used by parents with boys and girls, or different opportunities of males and females for offending' (p. 29). The fact that males appear to engage in more delinquent activity than females suggests that interventions aimed specifically toward protecting males from a criminal career are necessary.

Through understanding various patterns of criminal behaviour, it is possible to determine the factors that tend to increase one's chances of engaging in antisocial or delinquent behaviour and this should encourage the search for effective methods of decreasing individual's chances of involvement in such activity.

Risk factors

Previous research has repeatedly investigated factors that increase an individual's chances of engaging in criminal activity. These are often known as risk factors and can be defined as 'factors that increase the risk of occurrence of events such as the onset, frequency, persistence or duration of offending' (Farrington, 1996b, p. 27). Research has demonstrated that individuals who may be considered at greater risk of offending include: those whose parents have been involved in criminal behaviour (Rowe & Farrington, 1997), those who spend time with delinquent peers (Thornberry et al., 1994; Andrews, 1995; Farrington, 1996b; Paetsch and Bertrand, 1997; Beinart et al., 2002), those from large families (Farrington, 1996a; Farrington and Loeber, 1999, as cited in Farrington, 2000), those residing in broken homes (Audit Commission, 1996; Farrington, 1996b; Stattin et al., 1997; Asquith et al., 1998; Beam et al., 2002) and those experiencing academic failure (Blackburn, 1993; Farrington, 1996b; Asquith et al., 1998; Beinart et al., 2002).

Greenberger et al. (1998) investigated the role of non-parental very important persons (VIP) in adolescents' lives. These researchers discovered that the perceived characteristics of the VIP by the adolescents were significant predictors of young males' misconduct. That is, where the male adolescent believed their VIP to be involved in illegal behaviour, he was more likely to report engaging in misconduct himself. This suggests that parents should be
aware of the adult VIPs in their children's lives as the VIPs appear to play a significant role in the development of the behaviour of youth, in other words, the VIP may be a risk factor.

Risk factors have received a great deal of attention within research literature with regard to their influence on adolescents' involvement in delinquent activity. Protective factors may also impact adolescents' involvement in delinquent behaviour though research in this area is lacking. The review of protective factors below will demonstrate that researchers should ensure that the importance of protective factors and the interactions that exist between protective and risk factors are regularly investigated.

**Protective factors**

Although research investigating protective factors is not a new development, research investigating protective factors for at-risk youth is lacking. Protective factors are an important area of investigation as they can help to explain why some individuals who are high risk for offending do not engage in such activity. In other words, there are individuals who may have a high number of risk factors but who do not engage in delinquent activity and protective factors can potentially explain their lack of delinquent involvement. This concept has been addressed in literature discussing resilience (e.g. Rutter, 1985; Rutter et al., 1998) and stress-resistant children (e.g. Garmezy, 1985).

Some research has identified different categories of protective factors. Garmezy (1985, as cited in Bynner, 2002) suggested three groups of protectors: child-based (connected with self-esteem, personality and autonomy), family-based (connected with warmth and cohesion) and community-based (connected with external support systems). Lösel and Bliesener (1990) suggested only two groups of protective factors: personal resources (includes the dispositional characteristics of the individual) and social resources (includes the relationships within and outside the family). Regardless of the different number of groups adopted, acknowledgement should be made of the fact that protective factors comprise an individual's social, emotional, economic and educational influences (Bynner, 2002) and therefore each of these influences should be recognized in the chosen groupings of protective factors. It should also be recognized that personal and social factors do influence each other.

Lösel (1994) examined the protective effect of social resources in youth residing in an institutional setting who were deemed high risk for engaging in antisocial behaviour. This research found significant predictors of non-antisocial behaviour to include: ‘the presence of an emotional reference person, a satisfying social support network, and an institutional climate characterised by openness, autonomy, cohesion, organisation, and a low level of conflict’ (p. 292). In addition, Beam et al. (2002) demonstrated that adolescents who have warm, supportive people in their lives have better affective outcomes. In
other words, these adolescents have protective factors safeguarding them from committing crimes. Based on these studies, it could be said that non-parental very important people could provide a protective effect where they prove to be positive role models who are supportive of the youth in their care. This is important as not all youth are fortunate enough to have a positive adult in their life and these studies suggest a great need for youth to form bonds with positive role models.

A large study conducted throughout Britain investigated many risk and protective factors for youth (Beinart et al., 2002). This research concluded that social bonding was an important protective factor for a large proportion of youth; those youth who were able to relate well to adults outside their family (such as teachers) were at reduced risk of engaging in problem behaviour. Overall conclusions of this study indicated that youth needed to feel involved in their communities, families and schools and that they required recognition and praise for their efforts (Beinart et al., 2002). Such involvement could lead to lower participation in delinquent acts, as individuals may not want to harm the important relationships they have formed and they may feel significant discomfort regarding the idea of committing crimes against their communities, schools and so forth if they feel an attachment to each.

The existence of protective factors is not a new concept to the understanding of involvement in delinquent behaviour. Research is still lacking in this area, however, and examination needs to continue if society wishes to decrease the current rates of crime. Where research identifies external factors that provide a protective effect for youth, these factors need to be developed because many individuals are not fortunate enough to be exposed to protective factors from a young age.

**Extracurricular activities**

Participation in extracurricular activities (teams, organizations and clubs that occur after school and at weekends) may provide positive peer support, positive adult role models and the opportunity to participate in an activity during leisure time, thereby decreasing an adolescent's time to engage in delinquent behaviour. Youth who become involved in extracurricular activities have the opportunity to establish positive social supports and networks (Carnegie Corporation of New York, 1992, as cited in Eccles and Barber, 1999). Involvement in extracurricular activities allows youth to participate in such activities with positive role models and the opportunity to build relationships with individuals aside from members of their family or their usual peer group.

Research into various extracurricular activities considers several avenues. According to Quinn (1995), participation in youth organizations is valued by youth and adults and has a positive effect on the needs and competences of youth. Quinn (1995) also noted that community-based programmes have the
potential to promote prosocial behaviour. Petitpas and Champagne (2000) stated that sports programmes providing proper management and guidance have the potential to encourage development in social competence and decrease potential destructive behaviours. Youth activities have the potential to encourage positive development and positive group interactions for youth. Programmes that do not adhere to structured guidelines, however, may enhance negative learning experiences thereby increasing risk to the youth involved rather than increasing protection (Quinn, 1995).

Studies investigating youth participation in various activities have found several different outcomes. In a study investigating youth's descriptions of their experiences in participating in extracurricular activities, Dworkin et al. (2003) found that adolescents reported positive personal and interpersonal developmental processes. These included learning to set goals and manage their time effectively, taking responsibility and forming valuable relationships with adults. Caution should be taken when interpreting the results of this study, however, due to the fact that school counsellors selected the participants and this may have caused a selection bias.

Staheli (1995) investigated the effect of sports participation on adolescents whose parents were substance abusers. Conduct disorder scores were measured prior to and following participation in a three-month sports programme. Staheli's (1995) study showed that conduct disorder scores decreased following completion of the sports programme, suggesting that sports programmes could have a protective effect for youth demonstrating conduct problems. This study was limited, however, in that only a small sample of 10 adolescents was assessed.

Mahoney (1997, as cited in Eccles and Barber, 1999) found that participation in extracurricular activities was related to lower levels of offending. Furthermore, in a study investigating teenagers' physical activity, Pate et al. (1996) found that cigarette smoking, marijuana use and perception of low academic performance were associated with those who engaged in little to no physical activity. Pate and his colleagues (1996) noted that providing structures and supervised after-school activities may reduce adolescents' exposure to potential risk behaviours.

Not all studies have reported positive benefits of participation in extracurricular activities. Watkins (2000) discovered that more delinquent activity was found among Canadian secondary school students who participated in organized sports compared with those who did not participate at all. Furthermore, those who participated in community-based and mixed-locale activities engaged in significantly more delinquent acts than varsity-only athletes (those participating only in school sports) and non-athletes. According to this study, youth who have a strong desire to participate and perform well in a sport may be less likely to engage in any type of illegal activity that may hinder their performance or lead to suspension of participation.
A study by Duncan et al. (2002) investigated the relation between antisocial and prosocial activities in youth aged 10, 12 and 14 years. These researchers found that youth involved in physical activity generally had lower levels of substance use. Participation in organized non-sports activities, however, was not significantly related to substance use or deviance, except with 12-year-old boys (Duncan et al., 2002).

The particular type of extracurricular activity may make a significant difference in whether or not an individual engages in delinquent activity. In a longitudinal study, Eccles and Barber (1999) investigated the potential benefits of five activities: prosocial (cited as volunteering and church), team sports, school involvement, performing arts and academic clubs. They found that participation in prosocial activities was linked to low levels of involvement in risky behaviours whereas participation in team sports was linked to high levels of involvement in drinking alcohol. It is important to remember, however, that some risk behaviours typically occur in the teenage years as experimentation, such as drinking and taking drugs. Therefore, researchers should consider the ages of the participants and the possibility that they are at an age of experimentation.

Researchers have therefore found mixed results when investigating the effects of participation in extracurricular activities. The experience an adolescent gains from participating in extracurricular activities can depend as much on the influence of others as it does on personal motivation. Investigating the positive and negative effects of various activities allows parents and educators to gain insight into the activities that may have the most positive influence for young children and adolescents. Though a significant amount of research has investigated various effects of participation in extracurricular activities on the behaviour of youth, the majority of this research has been based in North America. Research is needed to determine whether the same results apply to the United Kingdom.

Present study

The present study seeks to determine whether or not participation in extracurricular activities acts as a protective factor for youth who are at risk of becoming involved in delinquent behaviour. It is hypothesized that participation in sports and clubs would provide a protective effect for at-risk youth as such participation would keep them occupied thereby providing less time to get into trouble. However, several of the studies discussed earlier have shown that participation in extracurricular activities does not always provide positive outcomes.

Activities to be considered in this study include sports, non-sports (such as hobbies and games), current activities (those in which participants are currently involved such as boy scouts and youth clubs) and previous activities (those activities that participants were involved with in the past). Delinquent activities under consideration include rule-breaking and aggressive behaviours.
Although a multitude of risk factors can be included in every study, only those that are easy to determine by means of self-report and have been identified through empirical research were chosen for the present study. These include: residing in a broken home (single-parent family versus dual-parent family), having four or more siblings, academic failure and lacking a non-parental very important person.

Method

Participants

Participants in this study were 169 (83 male and 86 female) students, aged 14–15 years, from a mainstream secondary school in Glasgow, Scotland. This school was in an area of Glasgow that drew students from a diverse range of socioeconomic backgrounds. Occupations of some of the parents from this school included skilled trades, elementary occupation, managers and associate professors, to name a few.

Students at the chosen school must complete a Personal and Social Development class and a total of 245 students were enrolled in this module. All 245 students enrolled in this class were asked to participate in this study. Participation was strictly voluntary and students were not offered any reward for their participation. Informed consent was required from all parents who agreed to have their child participate in this study.

Of the 245 students enrolled, 184 adolescents (75%) were in attendance on the day the questionnaires were distributed in their class and completed the Youth Self-Report and an additional information form. Fifteen students did not fully complete their questionnaires and therefore they were not included in this study, leaving a final sample of 169 (69%) third-year students.

The mean age of the students was 14.2 years (SD = 1.24) and the majority of the participants were Caucasian (75.1%). The mean number of siblings per student was 1.77 (SD = 0.42) and the majority of the students (60.9%) resided in an intact home (living with both biological parents). The mean academic average (the average taken between all grades self-reported by the participants) for the participants for the current year was 64.8% (self-reported). All of the 169 students listed participation in at least one type of extracurricular activity with the exception of three (1.8%) who did not claim any form of participation, past or present.

Materials

The Youth Self-Report

Participants were asked to complete the Youth Self-Report (YSR), a self-report measure designed for youth between the ages of 11 and 18 (Achenbach and
Rescorla, 2001). The YSR was selected for this study because it contains questions regarding participation in different types of extracurricular involvement and delinquent acts. The YSR has also been shown to be reliable and valid for use with youth aged 11–18 years (for details on the reliability and validity of the YSR, see Achenbach and Rescorla, 2001).

The completed YSR provides scores for eight syndrome scales. For the purposes of this study, the rule-breaking behaviour and aggressive behaviour scales were the only scales utilized as they were the only scales requesting information about involvement in delinquent activity. The total score for each scale was utilized for the statistical analyses.

Additional information form

A second questionnaire was distributed that contained nine questions. It was designed by the researcher to gain information that was not requested on the YSR such as previous participation in activities and whom the youth talks to when feeling sad or confronting a problem.

Procedure

Prior to beginning this study, ethical approval was granted from the Ethics Board at Glasgow Caledonian University as well as from the secondary school utilized for administering the questionnaires. The teacher responsible for each class distributed questionnaires during class time to all students who participated in the Personal and Social Development module. Questionnaires were kept confidential by asking the students not to write their names anywhere on the forms. In addition, the researcher did not record the names of any of the participants. Instead, each student was given a matching subject number for both the YSR and the Additional Information Form.

Results

Four categories of extracurricular activities were examined in this study: sports, non-sports, current activities and previous activities. Participants were given a number between zero and three in each of the four categories recorded (0 = no participation, 1 = one activity listed, 2 = two activities listed, 3 = three or more activities listed). Risk factors utilized in this study included: residing in a broken home, having four or more siblings, having an academic average of less than 50% and lacking a non-parental very important person. Each of the four activities along with gender and risk factors were utilized as independent variables. Age was not included as an independent variable based on the fact that a significant majority (79.9%) of the participants were 14 years of age.
The first research question for this study was whether or not participation in extracurricular activities could act as a protective factor for youth at risk and if so, whether this protective effect differed by gender. Each activity was investigated separately in order to determine if one provided more (or less) of a protective effect than another. Participation in sports was most popular for both males and females (males: \( M = 2.29, SD = 0.944 \); females: \( M = 2.48, SD = 0.850 \)) and participation in current activities was least popular (males: \( M = 0.63, SD = 0.837 \); females: \( M = .71, SD = 0.981 \)).

Females listed participation in more activities than males for all four possible extracurricular activity categories. Independent samples \( t \)-tests indicated significant gender differences for participation in non-sports (\( t (167) = 2.207, p < 0.05 \)) and participation in previous activities (\( t (167) = 2.629, p < 0.01 \)). The total participation in all four extracurricular activities shows that, on average, 14-year-olds participated in 6.12 different activities (\( SD = 2.582 \)).

The majority of students listed participation in three or more sports (62%) and non-sports (48%) with only a small percentage of all students listing no participation at all in either activity (5.3% and 5.9%, respectively). With regard to current and previous activities, the majority of students listed no participation (56% and 43%, respectively). It appears that this population of students was more involved in sporting activities and hobbies and games (non-sports) than youth clubs or other organizations (current and previous activities). When participation in all four activities is summed, only three people (1.8%) listed no participation in any extracurricular activities.

The second research question asked whether or not the protective effect of extracurricular activities (if found) depended on an individual's level of risk; in other words, the number of risk factors an individual carried. The absence of a non-parental VIP was the only risk factor in which the majority of the participants (85%) were at risk. Approximately 40% of the participants lived in a family where their natural parents were not living together. Only 8.3% of participants had four or more siblings and 18.3% reported academic failure (determined by the average grade for all of their courses over one year) for their present school year.

The means and standard deviations for involvement in rule-breaking and aggressive behaviour are listed in Table 1. Though the total mean for aggressive behaviour is higher (\( M = 8.78, SD = 6.407 \)) than that of rule-breaking behaviour (\( M = 6.95, SD = 4.988 \)), it should be noted that higher scores were possible for aggressive behaviours (34 versus 30) due to the fact that aggressive behaviour had more items on the YSR.

According to the means listed in Table 1, males participated in more rule-breaking and aggressive behaviour than females. Independent samples \( t \)-tests indicated a significant gender difference for involvement in rule-breaking behaviour (\( t (167) = 2.261, p < 0.05 \)) indicating that males engaged in more
Table 1: Means and standard deviations for delinquent behaviour

<table>
<thead>
<tr>
<th>Delinquent behaviour</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule-breaking behaviour:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83</td>
<td>1</td>
<td>22</td>
<td>7.82</td>
<td>5.020</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>0</td>
<td>24</td>
<td>6.10</td>
<td>4.839</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>0</td>
<td>24</td>
<td>6.95</td>
<td>4.988</td>
</tr>
<tr>
<td>Aggressive behaviour:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83</td>
<td>0</td>
<td>33</td>
<td>9.00</td>
<td>6.397</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>0</td>
<td>30</td>
<td>8.56</td>
<td>6.445</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>0</td>
<td>33</td>
<td>8.78</td>
<td>6.407</td>
</tr>
</tbody>
</table>

rule-breaking behaviour than females. No significant gender difference was found for involvement in aggressive behaviour ($t (167) = 0.447, p > 0.05$).

Table 2 displays the results of the hierarchical multiple regression of gender, sports and non-sports on rule-breaking behaviour. Gender was entered into the equation first due to the expectancy of a significant relationship with rule-breaking behaviour ($r = 0.172, p < 0.05$). Gender accounted for 3% of the variance ($R^2 = 0.030$) in rule-breaking behaviour when entered into the equation, which was found to be significant ($F (1, 167) = 5.112, p < 0.05$). In step 2, participation in sports was added to the prediction of rule-breaking behaviour by gender. These two variables accounted for 3.6% of the total variance ($R^2 = 0.036$) for involvement in rule-breaking behaviour, which was found to be significant ($F (2, 166) = 3.072, p < 0.05$). After step 3, with participation in non-sports added to the prediction of rule-breaking behaviour by gender and participation in sports, 4.2% of the variance for involvement in rule-breaking behaviour was accounted for ($R^2 = 0.042$), which did not provide a significant improvement from step 2 ($F (3, 165) = 2.382, p > 0.05$). The results indicate that the independent variables in the hierarchical regression accounted for only a small percentage of variance in the amount of involvement in rule-breaking behaviour.

The hierarchical multiple regression of the relationship between sports and gender on aggressive behaviour is displayed in Table 3. Participation in sports was entered into the equation first as a significant relationship was expected ($r = 0.144, p < 0.05$). Participation in sports accounted for 2% of the variance for involvement in aggressive behaviour ($R^2 = 0.021$). This was not found to be significant in the regression equation ($F (1, 167) = 0.200, p > 0.05$) despite evidence that a significant correlation existed between participation in sports and involvement in aggressive behaviour.
Table 2: Hierarchical multiple regression of gender, sports and non-sports on rule-breaking

<table>
<thead>
<tr>
<th>Step</th>
<th>Measures entered</th>
<th>r</th>
<th>B</th>
<th>B</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sports</td>
<td>0.144*</td>
<td>1.027</td>
<td>0.144</td>
<td>3.545</td>
<td>0.021</td>
</tr>
<tr>
<td>2</td>
<td>Sports</td>
<td></td>
<td>1.064</td>
<td>0.149</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>0.035</td>
<td>0.641</td>
<td>0.050</td>
<td>1.978</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Notes: *Denotes significance at the 0.05 level (one-tailed). Current activities, previous activities and risk factors are excluded from this table owing to their non-significance.

Table 3: Hierarchical multiple regression of sports and gender on aggressive behaviour

<table>
<thead>
<tr>
<th>Step</th>
<th>Measures entered</th>
<th>r</th>
<th>B</th>
<th>B</th>
<th>F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>0.172*</td>
<td>1.715</td>
<td>0.172</td>
<td>5.112*</td>
<td>0.030</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td></td>
<td>1.796</td>
<td>0.180</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>0.059</td>
<td>0.432</td>
<td>0.078</td>
<td>3.072*</td>
<td>0.036</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
<td>1.690</td>
<td>0.170</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>0.636</td>
<td>0.115</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-sports</td>
<td>-0.064</td>
<td>-0.439</td>
<td>-0.086</td>
<td>2.382</td>
<td>0.042</td>
</tr>
</tbody>
</table>

Notes: *Denotes significance at the 0.05 level (one-tailed). Non-sports, current activities, previous activities and risk factors are excluded from this table owing to their non-significance.

Discussion

The results of the present study indicate that participation in extracurricular activities does not act as a protective factor for youth who are at risk of engaging in delinquent behaviour. The results failed to indicate a positive relationship between participation in extracurricular activities and lack of involvement in delinquent activity.

Participation in extracurricular activities

Involvement in sports and non-sports appeared to be popular with this group of secondary students. Females, on average, listed more participation in all four of the extracurricular activities, though statistical significance was only evident with participation in non-sports and previous activities. Eccles and Barber (1999) also found a higher average of female participation in extracurricular activities. These researchers also noted that males were more likely to participate in sports than females, a finding that is not replicated by the present study.
The participants in the present study listed involvement in an average of 6.12 different activities. These findings are similar to that of West et al. (2002) who found Glasgow youth (aged 15) to participate in an average of 6.3 different activities. Only three participants (1.8%) claimed no involvement in any activities at all. It is possible that no association was found between participation in extracurricular activities and delinquent behaviour because there were too few students with no participation in any activities. Furthermore, there were very few students who did not participate in sports or non-sports. A more balanced level of participation throughout each activity may have demonstrated different results.

A question was raised as to whether or not previous participation in activities provided a protective effect against involvement in delinquent behaviour for those students who were not currently involved in extracurricular activities. The results of the present study did not indicate a protective effect for the participants in this category, therefore no analysis was conducted. This is probably due to the fact that the sample only allowed for a comparison with three students not presently participating in any activities at all. Previous research does not appear to have considered investigating the effects of previous activity involvement; most researchers have seemed to focus on current activity participation (e.g. Staheli, 1995; Eccles and Barber, 1999; Watkins, 2000).

Risk factors

The present study did not find a significant relationship between the four risk factors investigated and involvement in either of the categories of delinquent behaviours. Most probably, this is because the majority of the participants in the present study were not at risk in terms of having four or more siblings (91%) or failing grades (81%). Previous findings suggest that intelligence may play a significant role in risk and protection (Stattin et al., 1997; Beinart et al., 2002), therefore it is possible that the level of risk was not significant in the present study due to fact that few students had failing grades (19%).

The participants' level of risk was more evident with regard to broken homes, where 41% were at risk. Residing in a broken home did not demonstrate a significant relationship with regard to involvement in delinquent activity in the present study, though being raised in a non-intact home has previously proved to be a strong predictor of frequent criminal involvement (Stattin et al., 1997).

With regard to participants lacking a non-parental VIP, the majority were at risk (85%). The presence of a non-parental VIP was not found to significantly predict involvement in delinquent activity in the present study. This may be due to the fact that most participants were not at risk in the other three risk-factor categories. However, having a positive social support system outside the family has been said to demonstrate a protective effect (Garmezy, 1985; Beinart et al., 2002).
Involvement in delinquent behaviour

First, it should be noted that comparisons with normative data for rule-breaking and aggressive behaviour were difficult owing to the method of investigation in the present study. The Youth Self-Report combines the scores of delinquent activity to form one externalizing scale (Achenbach and Rescorla, 2001). The present study, however, chose to investigate rule-breaking and aggressive behaviour separately. For this reason, the data from previous studies utilizing the YSR could not be compared with the data from the present study as previous researchers have not investigated the delinquent behaviours separately.

Of significance was the finding that gender was positively correlated with rule-breaking behaviour (suggesting that males engage in more rule-breaking behaviour than females). As mentioned, previous studies have found similar results (e.g. Loucks et al., 2000). With regard to aggressive behaviour, no significant gender difference was evident. This finding is interesting because it was expected that males would engage in more aggressive behaviours than females, following previous findings (e.g. Rutter et al., 1998). However, male and females in the present study were fairly evenly distributed in their aggressive behaviours. The lack of a significant difference between the genders with regard to their aggressive behaviours may suggest that gender roles are changing. It may also suggest that significant differences in aggressive behaviour exist between youth from Glasgow and youth in other parts of the world.

A positive correlation was found between participation in sports and involvement in aggressive behaviour. This finding suggests that participation in sports acts as a risk factor rather than a protective factor. Studies investigating the effects of participation in sports with regard to involvement in delinquent behaviour have demonstrated mixed findings. Results may depend on the structure and supervision of the sport under investigation (Quinn, 1995) or the motivation of the individual participants (Patrick et al., 1999). Consideration of such factors in the present study may have provided an explanation as to why participation in sports increased involvement in delinquent activity.

The low level of general involvement in delinquent activity is one possible reason why this study failed to find a significant positive relationship between extracurricular activities and involvement in delinquent activity. If involvement in delinquent activity is prevalent during adolescence (Farrington, 1996a; Lösel, 1994; Rutter et al., 1998), then it is possible that the participants in the present study were not being completely honest in their answers regarding their involvement in delinquent activity. However, it is also possible that the participants had not begun or had already desisted offending. Rutter et al. (1998) stated that official statistics in the United Kingdom suggest that the peak age of offending is 18 years of age for males and 15 years for females, but self-report data suggests even later periods of offending (21 years and 18 years, respectively). The majority of the participants in the present study were 14 years
of age so if the statistics discussed by Rutter et al. (1998) are correct, these participants may not have yet started to engage in many delinquent activities.

Limitations

Several possibilities exist as to why this study found no relationship between the various categories of extracurricular activities and delinquency. First, 61 students (25%) were absent on the day that the questionnaires were distributed to their class. It is possible that these absent students may have been more (or less) involved in delinquent activity than those who completed the questionnaires. Though the sample size for this study was adequate, results may have been quite different with an additional 61 participants. Investigating participants from the community might have also provided quite different results as participation levels may have been significantly different from the present sample of students.

A second limitation of this study is that the secondary school requested that the classroom teachers administer the questionnaires. Although the questionnaires were anonymous (in that they did not require the students to write their names on them), the students may have been concerned that the teachers would have reviewed the questionnaires and therefore the students may not have been completely honest.

The reliability of self-report measures is always a concern as the possibility of concealment and forgetting arises (Farrington, 1996b). The present study questioned involvement in delinquent behaviour throughout the last six months, which may have helped to control for the possibility of forgetting. The reliability and validity of the YSR have been examined (Achenbach and Rescorla, 2001) and neither was a concern for this study. The veracity of the answers, however, is something that was not possible to test.

The YSR is merely one section in a series of potential measures. It is suggested by the YSR manual that some of the other measures be utilized (such as the Teacher's Report Form) in addition to the YSR (Achenbach and Rescorla, 2001). Unfortunately, because of time constraints and limited resources, completion of additional measures was not possible. Utilizing additional measures would have allowed for a comparison of answers and therefore the reliability and veracity of the adolescents' answers could have been compared with the answers provided by others involved in their care. However, the question as to how truthful and open the adolescents are with their teachers and parents could arise.

The present study did not consider alternative protective factors that may have affected the students. It is possible that some of the participants had protective factors that were dominating over some or all of the relevant risk factors that were examined. It is also possible that some youth had other risk factors that were not included in the present study; for example, poor parental
supervision (Beinart et al., 2002; Farrington and Loeber, 1999, as cited in Farrington, 2000) or friendships with delinquent peers (Thornberry et al., 1994; Andrews, 1995; Farrington, 1996b; Paetsch, & Bertrand, 1997; Beinart et al., 2002). When occurring in isolation, few individual risk factors carry much risk and few protective factors wield much protection (Rutter et al., 1998). For this reason, it is beneficial to try to consider as many risk and protective factors as possible.

Lastly, limitations with the age group utilized may exist. As mentioned, it is possible that the participants in the present study had not yet engaged in any delinquent behaviour. It is also possible that participation in certain activities depends on the age group under investigation. It may have been more beneficial to use a wider range of age groups, perhaps selecting several classes from each year available at the secondary school.

Future considerations

Future research considering the relationship of participation in extracurricular activities with involvement in delinquent activity may wish to consider conducting interviews rather than relying completely on self-report measures. If self-report measures are to be utilized, perhaps it would be more beneficial to have the researcher or an assistant administer the questionnaires so that the participants may feel there is more anonymity in their responses. Alternatively, utilizing parent or teacher reports would allow for a comparison of answers between the caregivers and the youth.

Ideally, research investigating risk and protective factors should try to determine all of the risk and protective factors that are present within each individual. This would require a great deal of work owing to the number of possible risk and protective factors, but would help to ensure a reliable outcome as the researcher could investigate all possible interactions.

Further investigation into previous involvement in extracurricular activities is important as it may provide a protective effect. Organized activities have the potential to encourage a sense of membership in one’s community (Eccles and Barber, 1999), which may prove to be significant for youth because it has been found that opportunity for involvement in one’s school and community is a protective factor (Beinart et al., 2002). The possibility exists that youth who may not participate in extracurricular activities during adolescence, but who participated in activities for a period of time prior to adolescence, may be protected from involvement in criminal behaviour if they had positive experiences in their previous activities.

Researchers should consider using a wide age range in future studies of protective factors and extracurricular activities associated with delinquent activity. Although offending peaks during adolescence, there is no guarantee as to what age this will occur at for any given individual. It is also the case that the
peak age of offending is different for males and females (Rutter et al., 1998), therefore a range of ages would help to control for this trend. Furthermore, a longitudinal analysis would allow a researcher to determine any offending patterns that may exist and would also allow for an investigation of the protective factor and/or the effect of participation in extracurricular activities over a period of time. Longitudinal studies would also allow researchers to determine whether protective factors and/or participation in extracurricular activities have different outcomes for life-course persistent versus adolescent-limited offenders (Moffitt, 1993).

Summary

The present study investigated the potential protective effect of participation in extracurricular activities for youth considered at risk of engaging in delinquent behaviour. Analyses revealed that participation in extracurricular activities did not act as a protective factor for 14-year-old secondary students living in Glasgow, Scotland. Furthermore, the number of risk factors held by the participants did not demonstrate any significance with regard to rule-breaking or aggressive behaviour.

No significant relationships were present between any of the four categories of extracurricular activities and involvement in rule-breaking behaviour. A significant relationship was found for gender, however, indicating that males participated in significantly more rule-breaking behaviour than females. With regard to involvement in aggressive behaviour, a significant relationship was found with participation in sports indicating that those who participated in sports were more likely to be involved in aggressive behaviours.

Further investigation of protective factors is required and the ability to help young children acquire protective factors is warranted if society wishes to help youth to develop to their full potential and avoid potential pathways to crime.

References


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