GENDERED LEISURE ACTIVITY BEHAVIOR AMONG NORWEGIAN ADOLESCENTS ACROSS DIFFERENT SOCIO-ECONOMIC STATUS GROUPS

Ingrid Leversen, Torbjørn Torsheim, and Oddrun Samdal

Abstract: The present paper explores gendered behavior based on participation patterns of leisure activities among adolescents across socio-economic status (SES) groups, aiming to increase knowledge and understanding of how gender socialization processes are expressed through boys’ and girls’ participation in leisure activities. Furthermore, the aim is to investigate whether such gendered behavior is associated with general levels of participation, and if there may be differences between low, middle, and high SES groups. The study used Norwegian nationally representative data of 15- and 16-year-olds from the World Health Organization's cross-sectional survey, Health Behaviour in School-aged Children 2005/06 (n = 3,273). Logistic regression analysis and propensity scores showed that adolescent boys and girls had clear gendered behavior patterns based on leisure activity participation in 27 different activities, and that boys and girls had about equal distributions on what was classified as typical (“boyish” or “girlish”), atypical, and neutral gender behavior. Furthermore, gendered behavior was correlated with higher levels of participation for both sexes, and it was more or less similar for boys and girls and for different socio-economic status groups. However, when investigating differences in distributions between SES groups, high SES girls were found to have a significantly higher prevalence of both “boyish” and “girlish” activity behavior, but less “gender-neutral” compared with girls in medium and low SES groups. There were no such differences for boys.

Keywords: adolescents, leisure activities, gendered activity behavior, gender socialization, socio-economic status

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Leisure activity participation constitutes a large and important part of young people’s lives. An active leisure time is associated with greater well-being, good mental health, and increasing likelihood of healthy adjustment in the future (Caldwell, 2005; Casey, Ripke, & Huston, 2005; Larson, 2000). However, the prevalence and preferences of activity participation may differ between subgroups of adolescents. Previous research has demonstrated strong differences between boys and girls in how leisure time is spent and choices and preferences in adolescents’ leisure activities (e.g., Athenstaedt, Mikula, & Bredt, 2009; Fitzgerald, Joseph, Hayes, & Oregan, 1995; Hilbrecht, Zuzanek, & Mannell, 2008; Larson & Verma, 1999; West & Zimmerman, 1987). Overall, boys tend to do more team sport than girls, whereas girls are more often involved in individual sport and music and drama activities (e.g., Hirsch et al., 2000; Jacobs, Vernon, & Eccles, 2005; Pedersen & Seidman, 2005). Gender-stereotypical presentation of activities may prohibit adolescents from participating in activities in which they have a genuine interest. Consequently, overall levels of participation may be negatively affected as the smaller numbers of activities the adolescents perceive are available to them, the less active they are likely to be. In order to provide both sexes with equal opportunities for an active leisure time, it is thus important to increase current knowledge on such differences in leisure activities and to better understand the mechanisms that may influence differences in participation patterns between the sexes.

Gender socialization may be an important mechanism to both understand and counteract observed differences in leisure activity participation between the sexes. Adding to the media, the larger society, and the influence of peers, the family plays a major role in establishing and developing values, ideologies, and norms that influence adolescents’ gender identity development, and thereby also their interests and behaviors. The development of such values and preferences are also found to be dependent on the socio-economic status of the family (Bourdieu, 1984; Cassidy, 2005; Raymore, 2002). Exploring gendered behavior based on the activity patterns and interactions among adolescent boys and girls in and of themselves, and with respect to their parents’ socio-economic status, may thus offer new knowledge on social influences on adolescents’ gendered behavior and this is also the objective of the current paper. This knowledge may provide a new basis for developing actions to equalize gender opportunities in leisure activity. These relationships will be investigated and discussed against a backdrop of a gender-sociological perspective.

**Gender Socialization and Adolescents’ Leisure Choices**

The leisure time of adolescents may provide them with free choices of activities in which to participate, enabling them to develop their identity, improve self-regulation, and express an interest (Eccles & Barber, 1999; Eccles, Barber, Stone, & Hunt, 2003; Fredricks et al., 2002; Larson, 2000). Boys and girls may have different subjective values regarding options of activities. They may also attach different values to different activities, which are likely to influence the choices they make. Leisure activities may thus vary for boys and girls in the extent to which they provide the opportunity to explore one's masculine or feminine self, and participation may therefore be influenced by gender-role identity (Eccles et al., 2003). Gender may be described as a culturally defined set of meanings attached to sex and
sex differences, where sex is categorized on the basis of anatomy and physiology (Unger, 1979). Thus gender, based on this view, is referred to as the social meaning of the biological distinction. Helgeson (2005) further described gender as referring to the social categories of male and female, which are distinguished from each other by “a set of psychological features and role attributions that society has assigned to the biological category of sex” (p. 3). West and Zimmerman (1987) explained gender divisions as a combination of perceptual and behavioral patterns produced through social interactions and embedded in recurrent, everyday activities. In trying to understand the impact of social interaction on the leisure choices of adolescent boys and girls, it is important to consider the societal or cultural socialization of gender as they grow up.

Many theories have contributed to the understanding of gender socialization. Bem’s (1981, 1983) theory of gender schemas describes the process by which humans acquire and transmit culturally defined sex-specific concepts of femininity and masculinity. The schema is a framework, which organizes objects and behaviors as male or female. It is believed to become internalized and predispose individuals throughout life to construct an identity that embodies and reproduces the beliefs classified in the schema. Many sports activities, such as soccer, have been associated with masculinity, in defining what it means to be a “real” man or boy (Scraton, Fasting, Pfister, & Bunuel, 1999; Skelton, 2000). Masculine sports (such as soccer and wrestling) are frequently identified as having a more competitive nature (Metheny, 1965; Riemer & Visio, 2003) whereas stereotypes of feminine sports have focused more on aesthetics and rhythms (such as gymnastics and aerobics).

The Influence from Parents and Peers on Gender Socialization

Parents may, as role models and socialization agents, influence and facilitate their children’s participation in leisure activities in a number of ways; for example, through parental example, messages that parents provide regarding the value they attach to various activities, and their being leisure educators and providers of opportunity (Jacobs et al., 2005; Raymore, 2002). Parents communicate norms and values to their children through what they say and what they do. They may talk to their children specifically about why leisure time is important and why some behaviors are more acceptable than others (Ennet, Bauman, Foshee, Pemberton, & Hicks, 2001; Wood, Read, Mitchell, & Brand, 2004). In this process of socialization, which may be led by typical feminine and masculine schemas and stereotypes, parents encourage specific activities for their children in accordance with what they see as desirable and appropriate for girls or boys (Helgeson, 1994; Schmalz, 2006).

Parental socialization patterns may exert very different effects on sons and daughters. Works on the socialization of expectations, especially regarding academic achievement, have suggested that parents have different beliefs for boys and girls regarding their academic abilities, and that they communicate these beliefs through various behaviors (Crouter, McHale, & Bartko, 1993). Similarly, it is reasonable to assume that parents may encourage their children to participate in activities congruent with their gendered beliefs about their children’s abilities and the typical activities matched with these beliefs (Eccles, 1987).

In addition to the parents and the family, peers are significant contributors to children’s gender-role development. In social cognitive theory, the role of peers in modelling
normative gender attributes and reinforcing gender-typical behavior is underscored (Bussey & Bandura, 1999). It has further been suggested that through interactions with others, children experience pressure to conform to gender norms, which may result in a reduction of gender-atypical characteristics and greater adherence to gender expectations (Egan & Perry, 2001). Empirical work has furthermore found that children disapprove of peers who engage in gender-atypical behavior (Blakemore, 2003; Carter & McCloskey, 1984; Lobel, 1994; McAninch, Milich, Crumbo, & Funtowicz, 1996), especially gender-atypical boys who have been found to be more prone to adolescent bullying, and also psychological distress (Young & Sweeting, 2004) and lower levels of school adjustment (Ueno & McWilliams, 2010).

Adolescence is a vulnerable time, and the felt pressure to participate in activities congruent with their gender may be high.

**The Role of Social Position for Socialization Processes**

The individuals’ preferences for activities may be connected to their social position. This is what, in the sociological theory of Bourdieu (1984), is called “habitus”. Social habitus is linked to the individual’s different resources, especially economic and cultural, and it is defined as a system of dispositions that controls the acts of individuals. These dispositions are products of the social conditions in which individuals grow up. Gender is, moreover, considered to be a fundamental dimension of the habitus that modifies all the social qualities that are connected to essential social factors. Gendered habitus thus broadly refers to the social construction of masculinity and femininity (Bourdieu, 2001). The knowledge provided to the child is already structured by the society, and especially by the influence of parents. This process of taking over and internalizing this knowledge contributes to a reproduction of the social system, meaning that children and adolescents are influenced to behave similarly to significant others and to follow what is supported within the social environment. Building on Bourdieu’s theory, the parents’ socio-economic status is likely to exert influence on the gendered upbringing of their children. Fathers and mothers with high educational and occupational status may have more cultural resources at their disposal, and may thus be more likely to create an intellectual environment that encourages children to actively participate in leisure activities to get a broader base for their learning. Additionally, this group of parents may stimulate their children to question traditional attitudes and activity choices so that they participate in a broader range of activities, including cultural activities, and not only the traditional sports activities (Myers & Booth, 2002). Several studies have suggested that a higher level of education, more economic advantages, and having a working mother are associated with more liberal gender-role attitudes and ideology (Corder & Stephan, 1984; Crompton & Lyonette, 2005; Kulik, 2002; Lackey, 1989; Marks, Lam, & McHale, 2009; Quarm, 1983). Such differences in socio-economic assets may potentially result in more children in the high SES group to cross gender borders in boy- or girl-dominated activities.

**The Present Study**

Previous studies have primarily addressed sex differences in leisure activity participation, where boys have been found to spend more time on team sports and computer-related activities than girls, whereas girls have been found to do more individual sports and
creative activities – such as music, drama, and dancing – than boys (Eccles & Barber, 1999; Fitzgerald et al., 1995; Hirsch et al., 2000; Jacobs et al., 2005; Larson & Verma, 1999; Pedersen & Seidman, 2005; Schmalz, 2006). A study by Young and Sweeting (2004) used a gender diagnostic approach to investigate the associations between gender- atypical behavior, gender role, and different psychological outcomes and peer relations among a sample of 15-year-olds. The gender diagnostic calculation was built on the work by Lippa and Connelly (1990) and includes a series of discriminant analyses of data on frequency of participation in different leisure activities such as looking around in shops, hanging around in the streets, and doing different sport activities. In the present study we used a similar approach to the discriminant analyses to classify gendered behavior based on more typically organised activities in which they participate regularly (weekly). Rather than focusing on the extremes of atypical behavior and its associations, this study sets out to explore and describe the differences in degrees of gendered participation in leisure activities. The study aims to contribute to the understanding of how and to what degree gender socialization processes can be expressed through boys’ and girls’ leisure activity participation within different socio-economic status groups, and whether it is associated with their overall activity levels. The first objective of the present study was therefore to examine gendered behavior predicted by adolescents’ leisure activity participation. Based on the previous research on leisure activity patterns and theories of gender sociology, we expected that activity behavior would make a strong predictor for gendered behavior and gender group classifications. The second objective was to investigate whether such gendered behavior was associated with boys’ and girls’ general activity participation level, hypothesising that the less “boyish” or “girlish” the adolescents are, the fewer activities they see as available for them to participate in, and thus the less they participate in general.

The third objective was to explore gendered behavior based on activity participation in association with their parents’ socio-economic status (SES). In the light of previous research showing more liberal gender attitudes in high SES groups, it is a possibility that this will also be present in adolescents’ leisure choices. Thus, we wanted to explore whether parents with high socio-economic status could be seen to have a more liberal attitude and influence on their children and whether low SES parents have a more traditional influence with regard to what boys and girls do in their leisure time, observed through SES differences in the adolescents’ activity participation. SES-influenced attitudes may thus potentially lead to a stronger gender-typical leisure behavior in low SES groups and more atypical behavior in high SES groups.

Methodology

Participants and Procedure

The paper is based on data from the Norwegian part of the seventh World Health Organization associated survey, *Health Behaviour in School-aged Children (HBSC) 2005/06* (Currie, Samdal, Boyce, & Smith, 2004). A nationally representative sample of Norwegian adolescents aged 15 and 16 years were used in the study. The students were selected with a stratified, systematic sampling procedure, and the sampling unit was the school class. The sample numbered 1,537 from Grade 10 (mean age 15.48 years) and 1,736 from Grade 1 upper secondary class (mean age 16.51 years). There were approximately equal numbers of boys and girls (51.8% boys). One class per school participated in the study. Of the invited schools,
70% chose to participate in the study (30% of schools refused), and in the actively participating schools, the student response rate was 83%. In sum, taking into account the non-participating schools, there was a response rate of 58% at the student level. The non-participating students were registered as absent because of sickness (445 pupils), individual or parental withdrawal from the study (163 pupils), or other unknown reasons for absence (217).

The data collection procedures were approved by the Norwegian Social Science Data Services Privacy Ombudsman for Research and classified as not needing additional approval from the Regional Committees for Medical Research Ethics. Data were collected in accordance with a standardized procedure of sampling procedures from the HBSC (Roberts et al., 2009) through an individual questionnaire given to all students in the selected classes. The survey was conducted in December 2005. A couple of weeks prior to the survey, parents received a letter with detailed information about the purpose and content of the survey. A passive consent procedure was followed, requiring parents to return a letter of non-consent to the teacher if they did not want their child to participate and giving them an opportunity to withdraw their child from participation. The teachers were given instructions on how to administer the survey. Questionnaires were distributed and filled out during an ordinary school class (45 minutes). Students were informed that participation was voluntary and that their responses were anonymous. All the data were treated anonymously.

Measures

Leisure activities. In this study, the independent variable of leisure activities comprised a list of 27 activities such as soccer, dancing, karate, playing an instrument in an orchestra/band, drama, volunteering, and church activities. The adolescents reported how often they participated in the different activities by ticking one of four options [“don’t do this activity” (0), “two to three times a month or fewer” (1), “about once a week” (2), or “twice a week or more” (3)]. For the analysis identifying gender-predicted groups based on activity participation, the responses were recorded only for those who participated weekly in an activity; this suggested it was a more regular activity, possibly representing the individuals’ (and the genders’) main interests.

Socio-Economic Status. In order to account for the possible various dimensions of socio-economic status influencing the patterns of leisure activity participation, three different indicators of socio-economic status (SES) were used: parental occupational status, family affluence, and cultural capital.

Parents’ Occupational Status (POS) was based on children’s responses on their parents’ occupations, and classified similarly to the British Registrar General’s social classification of occupations (Bray, Adams, Getz, & Stovall, 2001) reflecting the outcome of educational attainment: I, professional (SES 1 - High); II, managerial (SES 2); IIIN, clerical non-manual (SES 3); IIIM, skilled manual (SES 4); IV, semiskilled manual; V, unskilled (SES 5 - Low). Categories IV and V were combined because they represent very similar occupations. Both mothers’ and fathers’ occupational statuses were measured and used in the analysis. A Family Occupational Status variable was constructed, based on the parent with the highest registered status.
Family Affluence Scale (FAS) is an indicator of material wealth and is a composite of four indicators: “Does your family have a car or a van?” (“No,” “Yes,” “Yes, two or more”); “How many computers does your family own?” (“None,” “One,” “Two,” “More than two”); “Do you have your own bedroom?” (“Yes,” “No”), and “During the past 12 months, how many times did you go away on vacation with your family?” (“Not at all,” “Once,” “Twice,” “More than twice”) (Currie, Elton, Todd, & Platt, 1997; Currie, 2008). When the four indicators are combined to produce a linear composite score, the family affluence scale ranges from zero (lowest affluence) to nine (highest affluence). The scale has been validated as reflecting the material resources of the family (Andersen et al., 2008).

Cultural Capital refers to the number of books in the household as an indicator of the cultural capital of the family. It was measured by one question: “Approximately how many books do you have in your home?” Responses were reported on a seven-point scale: “none,” “1–10,” “11–50,” “51–100,” “101–250,” “251–500,” and “more than 500.” A similar measure for cultural capital has been used in other studies and shown to be an important dimension of socio-economic status (Georg, 2004; Myrberg & Rosen, 2006; Pedersen, 1996).

Unified Index for Socio-Economic Status (SES). To obtain a unified index for SES, a categorical principal component analysis was performed (Meulman, Van der Kooij, & Heiser, 2004) using IBM SPSS Statistics version 19 (SPSS Inc., n.d.), where the three indicators for SES were included (Torsheim, Leversen, & Samdal, 2007). The SES index is thus a formative scale that includes composite indicators (here parents’ occupational status, family affluence, and cultural capital), and the adolescents’ SES is thus determined by these three indicators (Bollen & Lennox, 1991).

In the present study, the estimated SES index component was further ridit transformed. A central assumption is that all three SES indicators included in this SES index have ordinal measurement properties. Ridit analysis is a method of analysis for such ordinal variables that proceeds from the assumption that the ordered categorical variable is an approximation of an underlying, but not measurable, continuous variable (Bross, 1958). The successive categories are assumed to correspond to consecutive intervals on the underlying continuum. Ridit transformation converts ordered categorical responses to cumulative probabilities, and the individuals are thus ranked on this continuum. Ridit transformation is an approach that has previously also been used for SES scales with ordinal measurement (Mackenbach & Kunst, 1997; Manor, Matthews, & Power, 1997).

In the present study the estimated SES index component was ridit transformed to yield a continuous socio-economic deprivation score ranging from 0 to 1, with a whole-sample mean of 0.5. A score of 1 indicated an adolescent at the top of the socio-economic hierarchy (with the highest material wealth, highest number of books in the household, and highest occupational status of the parents), whereas a score of 0 represented an adolescent at the bottom of the hierarchy. Students with ridit scores among the lowest 20% were classified in the present study as “Low SES”; students in the second, third, and fourth quintile (60%) were classified as “Middle SES”; and students with ridit scores among the upper 20% were classified as “High SES”. In the study by Torsheim and colleagues (2007) this indicator showed consistent results across different health behaviors.
Statistical analyses were conducted with IBM SPSS Statistics version 19 (SPSS Inc., n.d.). The analyses were performed in two stages. In Stage One the pattern in the data of leisure activity participation was used to classify gender distinctiveness and gender-typical behavior. A similar procedure for gender diagnostics has also been performed in other studies (Lippa & Connelly, 1990; Young & Sweeting, 2004), and is based on the assumption that behaviors that show differences between men and women (or boys and girls) in a given population serve as measures of what they call “maleness” and “femaleness”.

The estimated likelihood that an individual is boy (male) or girl (female) is thus based upon gender-related interests, such as leisure activities. In the present study propensity scores were used in order to predict the probability of “girlishness” or “boyishness” in activity type participation. Propensity score is the probability of a unit (e.g., a person) being assigned to a particular condition (here “boyishness and “girlishness”) in a study given a set of known covariates (Rosenbaum & Rubin, 1983). The score then summarizes all of the background (covariate) information (here about boys’ and girls’ participation in leisure activities) into a scalar. The propensity score may be found through logistic regression analysis.

In the present study “sex” was treated as the dependent variable, whereas the 27 different leisure activities were treated as the independent variables. The participants’ sex was coded “0” for boys and “1” for girls. High significant score estimates represented girl-typical activity behavior, low significant score estimates represented boy-typical activity behavior, and non-significant score estimates represented more gender-neutral activity behavior. The propensity score was obtained through logit transformation of the estimates from the logistic regression analysis. The logit is defined as the natural log \( \ln(p/(1-p)) \) where \( p \) is a proportion.

In order to show the distribution of scores and indication of skewness, a histogram was produced based on the density propensity scores for girls and boys. Based on the propensity scores, gendered behavior was collapsed into three groups: the first group contained the lowest 33.3%, classified as “boyish”; the second group contained the second percentile (33.3%), classified as “gender-neutral”; and the third group was composed of the upper 33.3%, classified as “girlish”. In Stage Two, we investigated the propensity scores of boys’ and girls’ gendered behavior through a histogram, and furthermore through regression analysis to explore whether the general level of participation was influenced by the gendered behavior of boys and girls. Finally, cross-tabulations were run in order to reveal possible differences in “girlishness”, “boyishness”, and “neutrality” (based on leisure activity participation) between high, middle, and low socio-economic status groups.

**Results**

**Classification of Gender Predicted Groups**

A logistic regression analysis was performed using the prevalences of participation in the 27 leisure activity variables as predictors of gendered behavior (and gender predicted groups). Table 1 presents results from these analyses.
Table 1. Results of logistic regression analysis in classification of gendered behavior, with estimates ranging from the most “girlish” to the most “boyish” behavior based on 27 different leisure activities ($N = 2,212$).

<table>
<thead>
<tr>
<th></th>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Wald Test</th>
<th>Odds Ratio</th>
<th>Lower CI</th>
<th>Higher CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dance</td>
<td>1.57</td>
<td>.15</td>
<td>111.89</td>
<td>4.80***</td>
<td>3.59</td>
<td>6.41</td>
</tr>
<tr>
<td>2</td>
<td>Aerobics</td>
<td>1.09</td>
<td>.14</td>
<td>59.22</td>
<td>2.99***</td>
<td>2.26</td>
<td>3.94</td>
</tr>
<tr>
<td>3</td>
<td>Hiking</td>
<td>.75</td>
<td>.09</td>
<td>76.65</td>
<td>2.11***</td>
<td>1.78</td>
<td>2.49</td>
</tr>
<tr>
<td>4</td>
<td>Handball</td>
<td>.71</td>
<td>.11</td>
<td>43.86</td>
<td>2.03***</td>
<td>1.64</td>
<td>2.50</td>
</tr>
<tr>
<td>5</td>
<td>Drama (theater/show)</td>
<td>.36</td>
<td>.27</td>
<td>1.75</td>
<td>1.43</td>
<td>.84</td>
<td>2.44</td>
</tr>
<tr>
<td>6</td>
<td>Singing in a Choir</td>
<td>.34</td>
<td>.23</td>
<td>2.25</td>
<td>1.40</td>
<td>.90</td>
<td>2.18</td>
</tr>
<tr>
<td>7</td>
<td>Gymnastics</td>
<td>.27</td>
<td>.22</td>
<td>1.47</td>
<td>1.31</td>
<td>.85</td>
<td>2.03</td>
</tr>
<tr>
<td>8</td>
<td>Jogging</td>
<td>.24</td>
<td>.08</td>
<td>8.22</td>
<td>1.27**</td>
<td>1.08</td>
<td>1.49</td>
</tr>
<tr>
<td>9</td>
<td>Take Music Lessons</td>
<td>.19</td>
<td>.14</td>
<td>1.86</td>
<td>1.21</td>
<td>.92</td>
<td>1.58</td>
</tr>
<tr>
<td>10</td>
<td>Scouting</td>
<td>.13</td>
<td>.27</td>
<td>2.2</td>
<td>1.14</td>
<td>.67</td>
<td>1.93</td>
</tr>
<tr>
<td>12</td>
<td>Swimming</td>
<td>.07</td>
<td>.17</td>
<td></td>
<td>1.08</td>
<td>.76</td>
<td>1.53</td>
</tr>
<tr>
<td>13</td>
<td>Volunteering</td>
<td>.03</td>
<td>.12</td>
<td>.05</td>
<td>1.03</td>
<td>.82</td>
<td>1.29</td>
</tr>
<tr>
<td>14</td>
<td>Church Activities</td>
<td>-.19</td>
<td>.16</td>
<td>1.35</td>
<td>.83</td>
<td>.60</td>
<td>1.14</td>
</tr>
<tr>
<td>15</td>
<td>Basketball or Other Ball Games</td>
<td>-.07</td>
<td>.11</td>
<td>.38</td>
<td>.93</td>
<td>.75</td>
<td>1.16</td>
</tr>
<tr>
<td>16</td>
<td>Sing/Play in a Band</td>
<td>-.16</td>
<td>.14</td>
<td>1.36</td>
<td>.85</td>
<td>.65</td>
<td>1.12</td>
</tr>
<tr>
<td>17</td>
<td>Athletics</td>
<td>-.20</td>
<td>.16</td>
<td>1.50</td>
<td>.82</td>
<td>.60</td>
<td>1.13</td>
</tr>
<tr>
<td>18</td>
<td>Boxing/kickboxing</td>
<td>-.21</td>
<td>.23</td>
<td>.85</td>
<td>.81</td>
<td>.52</td>
<td>1.27</td>
</tr>
<tr>
<td>19</td>
<td>Karate, Judo, Tae Kwondo, Jujitsu</td>
<td>-.27</td>
<td>.16</td>
<td>2.95</td>
<td>.77</td>
<td>.57</td>
<td>1.04</td>
</tr>
<tr>
<td>20</td>
<td>Cycle</td>
<td>-.30</td>
<td>.06</td>
<td>21.77</td>
<td>.74***</td>
<td>.65</td>
<td>.84</td>
</tr>
<tr>
<td>21</td>
<td>Snowboarding/Downhill Skiing</td>
<td>-.30</td>
<td>.09</td>
<td>10.71</td>
<td>.74**</td>
<td>.62</td>
<td>.89</td>
</tr>
<tr>
<td>22</td>
<td>Cross-country Skiing</td>
<td>-.54</td>
<td>.13</td>
<td>16.29</td>
<td>.58***</td>
<td>.45</td>
<td>.76</td>
</tr>
<tr>
<td>23</td>
<td>Soccer</td>
<td>-.66</td>
<td>.07</td>
<td>87.56</td>
<td>.52***</td>
<td>.45</td>
<td>.59</td>
</tr>
<tr>
<td>24</td>
<td>Make Music</td>
<td>-.69</td>
<td>.13</td>
<td>27.76</td>
<td>.50***</td>
<td>.39</td>
<td>.65</td>
</tr>
<tr>
<td>25</td>
<td>Ice Hockey</td>
<td>-.75</td>
<td>.22</td>
<td>11.61</td>
<td>.47**</td>
<td>.31</td>
<td>.73</td>
</tr>
<tr>
<td>26</td>
<td>Weight Lifting/Weight Training</td>
<td>-.88</td>
<td>.08</td>
<td>107.76</td>
<td>.42***</td>
<td>.35</td>
<td>.49</td>
</tr>
<tr>
<td>27</td>
<td>Wrestling</td>
<td>-1.47</td>
<td>.41</td>
<td>13.04</td>
<td>.23***</td>
<td>.10</td>
<td>.51</td>
</tr>
</tbody>
</table>

*95% CI* for OR

Note: OR are based on estimates when boys are set as indicator

“Girlish” activity behavior was most strongly predicted by activities such as dance, aerobics, hiking, and handball (estimates > 2), whereas “boyish” activity behavior was most strongly predicted by activities such as wrestling, weightlifting, ice hockey, make music, and soccer (estimates >.55). “Gender-neutral” activity behavior was predicted by activities such as scouting, swimming, volunteering, basketball, and being in a band.

Figure 1 shows the distribution of gendered behavior within the sexes, based on the density propensity score after logit transformation of the estimates from the logistic regression analysis. The density propensity scores show that boys and girls are skewed to each side of the centre (0) demonstrating the distribution of gendered behavior for each sex. The largest proportion of both boys and girls has a gender-neutral or gender-typical activity pattern. For both genders there is, as well, a small proportion of atypical behavior. The distribution of scores towards the atypical was relatively similar for both sexes.
A regression analysis between the propensity scores of gendered behavior and general participation level (when controlling for socio-economic status), revealed that boys’ gendered behavior (“boyish”) had a stronger impact on their participation level ($\beta = .43, p < .001$), than the impact of girls’ gendered behavior (“girlish”) on their participation level ($\beta = .20, p < .001$). In other words, the more gender-typical boys were, and to some degree girls, the more they participated in activities.

**The Relation Between Gendered Activity Behavior and Socio-Economic Status**

To investigate further the gendered behavior in different socio-economic status groups, the relationship between the gender predicted groups and SES were analysed through cross-tabulation of “boyish”, “gender-neutral”, and “girlish” behavior (split on sex), and low, middle, and high socio-economic status (Table 2).
Table 2. Results of cross-tabulation analysis between predicted gender group and socio-economic status group split on sex (N = 2,212)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Socio-Economic Status Group</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Middle</td>
<td>High</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SES</td>
<td>SES</td>
<td>SES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>Predicted group “Boyish”</td>
<td>55%</td>
<td>56%</td>
<td>58%</td>
<td>56%</td>
</tr>
<tr>
<td></td>
<td>Predicted group “Gender-Neutral”</td>
<td>36%</td>
<td>34%</td>
<td>30%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Predicted group “Girlish”</td>
<td>10%</td>
<td>10%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Mean gendered behavior</td>
<td>-.98(1.38)</td>
<td>-1.02(1.53)</td>
<td>-1.05(1.50)</td>
<td>-1.02(1.50)</td>
</tr>
<tr>
<td></td>
<td>Mean participation level</td>
<td>.09(.07)</td>
<td>.10(.07)</td>
<td>.12(.08)</td>
<td>.10(.07)</td>
</tr>
<tr>
<td>Girl</td>
<td>Predicted group “Boyish”</td>
<td>9%</td>
<td>9%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Predicted group “Gender-Neutral”</td>
<td>41%</td>
<td>35%</td>
<td>25%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Predicted group “Girlish”</td>
<td>51%</td>
<td>56%</td>
<td>60%</td>
<td>56%</td>
</tr>
<tr>
<td></td>
<td>Mean gendered behavior</td>
<td>1.05(1.57)</td>
<td>1.15(1.64)</td>
<td>1.16(1.85)</td>
<td>1.13(1.68)</td>
</tr>
<tr>
<td></td>
<td>Mean participation level</td>
<td>.08(.06)</td>
<td>.09(.07)</td>
<td>.11(.07)</td>
<td>.09(.07)</td>
</tr>
</tbody>
</table>

The results in Table 2 show that there were equal distributions in the gendered behavior groups for both boys and girls, with 56% having a gender-typical behavior (boys behaving “boyishly” and girls behaving “girlishly”), 11% having a gender-atypical behavior (boys behaving “girlishly” and girls behaving “boyishly”), and about 33% were “gender-neutral”. For boys the distribution of the different gendered behavior groups was also relatively stable across socio-economic status groups, showing no significant differences in gendered leisure activity behavior between high and low SES groups. The picture was, however, a bit different for girls. High socio-economic status girls were significantly more “boyish”, less “gender-neutral”, and more “girlish” in their leisure activity behavior than girls in the low socio-economic status group ($\chi^2 = 19.48, p < .01$). There was a tendency for low SES boys to be more “gender-neutral” than boys in the high SES group, similar to the pattern observed for girls, however this difference was not significant. Independent sample $t$-tests, revealed no significant differences in the means of the propensity scores of gendered behavior between the socio-economic status groups, neither for girls nor for boys. This signifies that the overall gendered behavior is about the same in all socio-economic status groups for both
the sexes. Additionally, there were no significant sex differences in gendered behavior levels, indicating about equal levels of gendered behavior in boys and girls in total. Furthermore, through independent sample \( t \)-tests, the mean level of activity participation was found to be significantly higher for adolescents in the high SES group than adolescents in middle and low SES groups, and this was evident both for boys \((t(d) = 4.22(1,1107), p < .001, \text{Cohen's d effect size} = .29)\) and for girls \((t(d) = 4.15(1,1101), p < .001, \text{Cohen's d effect size} = .29)\).

**Discussion**

The purpose of this study was to explore gendered behavior in Norwegian adolescents based on their leisure activity participation and to investigate whether there are differences in such gendered behavior between boys and girls and between socio-economic status groups. The study found support for the hypothesis in that there were clear gender-typical patterns in leisure participation in adolescent boys and girls. Leisure participation proved therefore to be a good indicator of the classification of gendered behavior for both boys and girls, and thus supports previous research where similar procedures for gender classification of behavior were used (Lippa & Connelly, 1990; Young & Sweeting, 2004). In general, boys were as “boyish” as girls were “girlish”, and this gendered activity behavior was positively associated with a higher level of activity participation. Such gender-typical patterns found in this study can be considered to be associated with societal gender socialization. A consequence of gender socialization may be that when the adolescents are choosing activities, some options may not be considered because they do not fit in well with the individual’s gender role perception. Integration of the culturally- and socially-defined gender role schema can have such a strong effect on how the world is viewed that activities classified as part of the opposite gender role may be rejected without much evaluation or consideration. Other studies have provided some support for this hypothesis (Eccles, 1987). The specific gender-typical activities found in the present study were, for boys, competitive team sports like soccer and ice hockey, and for girls, activities such as dance and drama. This is consistent with the findings in studies looking at similar kinds of activities (Hirsch et al., 2000; Jacobs et al., 2005; Pedersen & Seidman, 2005).

In line with previous research on liberal and traditional gender roles in socio-economic status groups (Crompton & Lyonette, 2005; Kulik, 2002; Lackey, 1989; Marks et al., 2009), it was hypothesized that adolescents from high SES groups would be more liberal in their activity choices and have less gender-typical activity behavior, and that adolescents in low SES group would be more traditional. However, the results in the current study did not find support for this hypothesis. Overall, the gendered behavior level was quite similar between boys and girls across the socio-economic status groups. This may indicate that the general gender socialization of boys’ and girls’ leisure activities in the Norwegian culture is so strong that possible socio-economic differences in gendered activity behavior are not so influential, or in other words, that the socialization process for choice of leisure activities is relatively independent of socio-economic status.

However, in the investigation of prevalence of “boyish”, “girlish”, and “neutral” behavior in the three SES groups, girls in the high status group were found to be both more “girlish” (gender typical), and more “boyish” (gender atypical) in their behavior than the girls in the low status group. Additionally, the girls in the low status group were more gender-
neutral than those in high status group. These findings were exclusively found for girls. The higher gender-atypical and gender-typical pattern across socio-economic status groups found for girls could be a result of the gender socialization within the family. High status parents may be more conscious of their influence and support for girls to participate in any activities that they have a true interest in, whether such activities are considered girl-typical or boy-typical. Such stimulation particularly of girls may be connected to a strong political focus over the last three decades in Norway on equal status and equal rights for both genders represented by the 1978 Law of Equal Status (Teigen, 2000), which has emphasized the equalization rights and opportunities for women and girls more than for men.

We also find these tendencies throughout the rest of Europe, Australia, and North America (Hargreaves, 1994), which could be seen as the political outcome of a liberal-feminist discourse that centres on equal opportunities for women, socialization practices, and legal or institutional reform. It is likely that such equality focus and changes in gender roles will influence the values and preferences for girls’ leisure activities. The strong cultural equity focus in Norway may also influence parents’ habitus and the transfer of world knowledge to their children. In line with Bem’s theory on culturally influenced gender schemas (Bem, 1981, 1983), previous research on gender-typed activities has suggested that such social changes also have opened doors for girls to participate more in traditionally masculine activities (McHale, Kim, Whiteman, & Crouter, 2004). Given this background, it might be perceived as more acceptable and “cool” for girls to participate in boy-dominated activities, although in parallel, the typical girl interests and activities are still highly valued. Some countries, and Norway in particular, have also been found to have a stronger development of well-organized youth policies for girls and young women, which helps them follow their true interests and increases the numbers of girls participating in leisure activities (Scraton et al., 1999). A similar encouragement of boys to participate in what are culturally viewed as feminine activities (Riemer & Visio, 2003) would probably demand more conscious encouragement from parents as there is a shorter cultural history for stimulation of boys to cross gender lines between traditionally identified masculine and feminine activities. One important point, however, is that in the present study only patterns of participation were measured. We do not know how the individuals perceived their leisure participation and how they may have perceived possible culturally or parentally imposed constraints regarding participation in atypical activities.

Depending on socio-economic status background, including differences in economic status, values, and prioritization, parents are likely to represent divergent socializing agents for their children. Although girls showed some differences in distribution in the classified gender behavior groups (“girlish”, “boyish”, and “neutral”), the overall level of gendered behavior was relatively stable across the socio-economic status groups for both girls and boys. This may indicate that the possibly different gendered upbringing in socio-economic status groups does not heavily influence the choice of specific activity participation. The socio-economic status of the parents may, however, influence adolescents’ leisure activity participation in other ways. In general, the results of this study show that there were clear variations in level of activity participation between socio-economic status groups, where adolescents of high status parents participated more in leisure activities in general than adolescents with low status parents. This is in accordance with other studies (Huebner & Mancini, 2003; Raymore, Godbey, & Crawford, 1994). A possible explanation could be that high status parents value leisure participation and strongly emphasize the stimulation of their children to participate in leisure activities. More adolescents from low SES families have
previously been found to report less parental influence, where parents intervene less in their choice of leisure activities, than adolescents from high SES families (Zeijl, te Poel, du Bois-Reymond, Ravesloot, & Meulman, 2000). Some studies have also shown that adolescents with high SES parents are more likely to have active parents (doing different activities themselves), thereby being good role models for their children in terms of participation in activities (Scheerder, Vanreusel, & Taks, 2005). These studies showed, however, that only parent participation and not the socio-economic status in itself influenced adolescents’ participation. High SES families have also been found to devote more of their free time to being physically active and engage more in various types of activities (Wold, Øygard, Eder, & Smith, 1994). Adolescents’ levels of leisure activity could therefore be seen as connected to their habitus. High SES families may value being active and recognize why it is important for health and for the development of social resources to a larger degree than do low SES families (Huebner & Mancini, 2003). This may then be transferred to their children directly through encouraging them to participate, but also indirectly by being good role models. The higher participation level found in this study for high SES adolescents could be explained by such role modelling and encouragement from parents.

The measure of parents’ occupation was based on individuals’ self-reporting, and comprised one of the indicators in the SES index used in this study. Self-reports in general can act as a limitation, especially for SES, because such subjective criteria might not give sufficient information on parents’ social status; children in many studies have been shown to have problems in reporting their parents’ characteristics of occupation, education, income, etc. (Goodman, 1999; Lien, 2001). The study sample does, however, include only 15- and 16-year-olds and they are more likely to be able to report more accurately on parents’ occupation. Furthermore, the SES unified index, based on three different indicators, was used for the analysis in this study. This may have given a more accurate and nuanced picture of the social influence of SES on adolescents’ leisure activities. For an even better understanding of the impact of sociological processes related to social status on adolescents’ leisure participation, it is suggested that future research include also parents’ education as an additional component for socio-economic status.

A major strength of the study is that it employs a nationally representative sample. Thus it is reasonable to assume that the findings provide a valid picture of adolescents’ participation in leisure activities in Norway when it comes to both overall levels for the included activities and association with gender and socio-economic status.

Conclusions and Future Directions

The present study has demonstrated clear gender-typical patterns of leisure participation among adolescent boys and girls, and there were no significant differences in gendered behavior between the sexes. When we compared the socio-economic status groups, there were increasing levels of participation with increasing status. There were, however, no or only minor variations in gendered behavior across the status groups, implying that gender stereotypes in activity participation in general are more a result of a general cultural and societal socialization than a specific parental socialization. Girls in high SES groups participated, nevertheless, both in more girlish and boyish activities than their counterpart middle and low SES groups, indicating that high SES girls may be more strongly stimulated
in the society and by their parents to follow their leisure interests regardless of whether activities are classified as either typical or atypical for their gender. Additionally, gendered activity behavior was positively associated with the adolescents’ higher activity level, which may indicate that gender-typical boys and girls may still perceive more activities as available for them to participate in.

In order to maximize the perceived availability of and thereby developmental opportunities through leisure activities, it seems pertinent to obtain a better understanding of mechanisms preventing and stimulating adolescents to cross gender-typical borders of leisure activities. It would be of particular relevance to replicate the study in other cultures to identify whether the relationships are similar or different from what is found in Norway. This may help us to create and implement effective programs both nationally and internationally, which can provide adolescents with a variety of activity opportunities that may stimulate their development. A first step in acting on the knowledge gained from the present study could be to implement policy interventions in the leisure setting encouraging and facilitating participation of activities regardless of gender. Further, the school setting represents a unique opportunity to expose boys and girls in all socio-economic status groups to a broader spectrum of activities aimed at balancing the exposure of stereotypical masculine and feminine activities and specifically stimulating and supporting adolescents’ choices of crossing gender lines if they like a given activity itself. This could be a way to render gendered activities more gender-neutral. Thus the activity may be in reduced conflict with the gender identity of adolescents, and it may be easier and more accepted for boys and girls to participate in a broader range of activities. Such actions in school may represent an important step in the equalization of gender differences in participation in terms of both level and type of activity. Additionally, a gender-conscious promotion of activities also by leisure clubs and organizations may positively influence the perceived availability of activities and the leisure choices of boys and girls.
References


