Chapter 7
Participation in sporting clubs located on the school campus

Based on:
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Introduction

In the Netherlands, government regulations suggest that the relationship between school and sport can influence a child’s level of school bonding and sport participation (Ministry of VWS, 2008a; Ministry of VWS & Ministry of OCW, 2008). These beliefs were at least partly based on studies examining participation in American high school sports, with results showing that increased participation correlated with many beneficial outcomes including increased school bonding (e.g., Jordan, 1999; Marsh & Kleitman, 2003), increased (long-term) sport participation (e.g., Curtis, et al., 1999), reduced school dropout rates (e.g., Mahoney & Cairns, 1997; McNeal, 1995), higher grades (e.g., Barber, et al., 2001; Broh, 2002; Lipscomb, 2007; Marsh & Kleitman, 2003) and increased self-esteem (e.g., Fredricks & Eccles, 2006). Importantly, in the USA competitive sports are explicitly integrated into the educational system and sport facilities at a school’s campuses are commonly used for curricular and extracurricular activities (Gems & Pfister, 2009; Mandell, 1984). As a result, interscholastic sports form an integral part of the social life of students at high schools (Gems & Pfister, 2009; Mandell, 1984). The connection between sport and the school is, for example, expressed by the sporting teams carrying the school’s name, and the involvement of other students in (non-playing) roles associated with the sporting competition, for instance as members of the school band or pep-rallies (Gems & Pfister, 2009; Stokvis, 2009). This clear integration of sport into the American high school system may at least in part explain why participation in school sport in the USA is associated with students developing a strong bond with the school (e.g., Jordan, 1999; Marsh & Kleitman, 2003). In addition, the mere presence of sport in American high schools may explain the relation with long-term engagement in sport (e.g., Curtis, et al., 1999) as socialisation in sports at a young age is important for long-term sport engagement (e.g., Birchwood, et al., 2008; Scheerder, et al., 2006). Several scholars have suggested that the formation of student identity and sport identity is involved in these processes (e.g., Brewer, et al., 1993; Marsh & Kleitman, 2003; Sturm, et al., 2011).

In contrast to the USA, in many Western European countries like the Netherlands, sport has typically remained outside of the educational system (Curry & Weiss, 1989; Hilvoorde, et al., 2010; Stokvis, 2009). Although the integration between high schools (for secondary education) and sports have emerged in the last few decades, most children in these Western European countries play sports in sporting clubs that act independently from the school system (Bottenburg, et al., 2005; Scheerder & Breedveld, 2004). For instance, a representative survey of students in secondary education in the Netherlands showed that 71% of students
participated in sports at sporting clubs that were independent from schools while only 22% participated in school sports (Stuij, et al., 2011). In that study, school sports were defined as extra-curricular sport events that were organised under the supervision of the school, such as a sport tournament against other schools, or sport on the school campus. Also, the amount of time the students in the study of Stuij et al. (2011) spent in these sporting contexts differed considerably, with an average of 157 minutes per week spent in club sports and only 18 minutes per week in school sport (Stuij, et al., 2011). This large discrepancy is likely to be a result of the low frequency of school sport events in the Netherlands which are mostly limited to a few days per year. In addition, the low frequency and intensity of school sports may be related to the fact that sports practiced at clubs are considered more important for students compared to school sports. Evidently, the contextual setting of (extracurricular) school sports are very different in the USA and the Netherlands, both in how they are organised, and in the social function they play in the school and sporting communities (Pot & Hilvoorde, 2013).

Although sport participation among Dutch youth is relatively high in general (Breedveld & Hoekman, 2011), recent Dutch policy has sought to further increase youth sport participation and to strengthen students’ commitment to their school and school-work (Ministry of VWS, 2008a, 2011a; Ministry of VWS & Ministry of OCW, 2008). The integration between sports and schools were considered a good means to achieve these goals, as policy-makers claimed that “...sport and exercise at school will cause better school results and decrease school drop-out” (Ministry of VWS, 2008a, p. 2) and “Sport can contribute to the bond that children have with their school” (Ministry of VWS, 2008a, p. 4). Furthermore, (school) sports were suggested in policy to contribute to the “motor, social and cognitive development of children” (Ministry of VWS & Ministry of OCW, 2008, p. 1) and an “active and healthy lifestyle” (Ministry of VWS, 2008a, p. 2). These expectations were based on (mainly) American studies on school sports (Ministry of VWS & Ministry of OCW, 2008) and stimulated the Dutch government to endorse all kinds of collaborations between schools and sporting organisations, clubs and associations that developed during the last decade (Ministry of VWS, 2008a; Ministry of VWS & Ministry of OCW, 2008). Examples of these collaborations are small-scaled local school sport tournaments, interscholastic competitions, and sport campuses where schools and sporting clubs reside together. Most of these school and sport initiatives in the Netherlands focus on schools providing lower level secondary education in neighbourhoods with a lower socioeconomic status. This focus was chosen because Dutch people with a low level of income and education tend to have a lower than average level of participation in sports (Tiessen-Raaphorst, Verbeek, Haan, & Breedveld, 2010;
Sporting clubs on the campus

Tuyckom & Scheerder, 2010). A similar pattern can be found in other European countries (e.g., Scheerder & Vos, 2011; Studer, Schlesinger, & Engel, 2011).

It is most likely that the Dutch government used American studies to inform their school sport policy simply because the majority of studies considering school and sports have been conducted in the USA. In Europe, this field of study has received little attention, which can at least partly be explained by the dominance of club sports in most Western European countries. Now that the integration between school and sport is on a rise in Europe, it is important to improve the knowledge base about these collaborations and their relationship with school bonding and long-term sport engagement in contexts where school sport does not have a strong tradition.

Sport campuses in the Netherlands

The present study focussed on the relationship between playing sport at a sport campus in the Netherlands and the level of school bonding and long-term sport engagement experienced by students. These sporting campuses are venues at which schools and regular sporting clubs share the same location and facilities. Similar to sporting clubs which are not located on these campuses, sporting clubs located on the campus are organised independently of the school and are open to everybody. Most schools do not use the sport facilities at their campus for curricular or extra-curricular activities, with the exception of gymnastics halls, which are sometimes used for physical education lessons. Therefore, the only difference between sporting clubs on or outside of a campus is the location of the sporting facilities relative to the school. This is in clear contrast to the USA, where sports on the campus (often) form an integral part of the curricular and extra-curricular program and social life of the school (Gems & Pfister, 2009; Mandell, 1984). Because of this contrast, the focus on sport campuses was chosen in the present study. In the Netherlands, club sports are clearly involved in these sporting clubs at a campus and the interaction with schools is minimal. Despite these differences, policy-makers in the Netherlands appear to expect that playing sports at a sporting club located on a campus will increase school bonding and the (long-term) sport participation of students, similar to the results found in American studies (Ministry of VWS, 2008a; Ministry of VWS & Ministry of OCW, 2008).

The policy documents (Ministry of VWS, 2008a; Ministry of VWS & Ministry of OCW, 2008) do not give a clear outline of the expected relationship between playing sports at a school campus and the outcomes described in these policy documents. However, we can hypothesise about the mechanisms behind this
presumed relationship. Research has shown that good sporting facilities in the vicinity of a school are positively correlated with the physical activity level of students (e.g., Sallis, et al., 2001; Taylor, et al., 2011). This stimulating school environment may enhance the enjoyment students experience by playing sport on their school's campus (Stuij, et al., 2011). Also, the absence of time and travel barriers that can withhold students from participating in sporting clubs located elsewhere (Humbert, et al., 2006), may stimulate sport participation and the positive feeling about their campus (which includes their school). As a result, it can be hypothesised that sport campuses in the Netherlands may lead to increased school bonding in addition to sport participation.

Although a number of studies have examined the influence of sporting facilities on sport participation (e.g., Limstrand, 2008; Sallis, et al., 2001; Wicker, Breuer, & Pawlowski, 2009), no studies have considered whether the proximity of schools to sporting facilities is sufficient to enhance school bonding and long-term sport engagement. Therefore, the aim of this study was to investigate whether the relationship between sport participation, school bonding and long-term sport engagement is modulated by the location of the sporting club (either on or off campus) in a context where club sport is dominant and the school sport culture is different from the USA. This was investigated by comparing students from two schools in secondary school education who either (i) do not play sport at all, (ii) play sport on their school campus, and (iii) attend the same school but play sport at other clubs not located on the campus. This research design provides insight into the possible role of the location of the sporting club while controlling for the potential influence of the very act of playing sports, by including students who do not play sport. Further, the possible influence of the school's social and physical environment was equal for all groups, as all respondents were from the same campus.

School bonding and sport participation as identity processes

As mentioned in the introduction, identity formation may explain the possible influence of school sports on school bonding and long-term sport engagement (Brettschneider, 2001; Brewer, et al., 1993; Lau, Fox, & Cheung, 2004; Marsh & Kleitman, 2003; Sturm, et al., 2011; Weiss, 2001). Drawing on identity theory, the identity of an individual can be seen as a multidimensional construct (e.g., Burke & Stets, 2009; Marsh, Perry, Horsely, & Roche, 1995; Stryker & Burke, 2000). The multiple identities that form the self-concept (e.g., sportsman, brother, student) are influenced and shaped by the different social contexts one is involved in
Sporting clubs on the campus (e.g., sporting clubs, family, school). These identities form a salience hierarchy; an identity placed higher in the hierarchy is more likely to be displayed in different situations, together with its related behaviour, attitudes and values (Abbott, Weinmann, Bailey, & Laguna, 1999; Burke & Stets, 2009; Miller, 2009; Stryker, 1968; Stryker & Burke, 2000). Most adolescents hold multiple identities that are related to different social contexts they are involved in, such as with family, friends, romantic relationships, religion, school and sports (Cieslak, 2004). It is important to distinguish between the strength of an identity and the relative salience of an identity compared to other identities (e.g., Cieslak, 2004). For example, two students actively engaged in sport might have a sporting identity of similar strength, but a religious student might rank his or her religious identity highest, whereas a non-religious student might rank his or her sport identity highest (Curry & Parr, 1988). In the process of self-concept formation, adolescents learn to negotiate between these different identities (Bradley, 1996; Gambone, Yu, Lewis-Charp, Sipe, & Lacoe, 2006). This negotiation process is influenced by the level of involvement in different social contexts (Banbery, Groves, & Biscomb, 2012; Burke & Stets, 2009). Being intensively involved in a certain context may increase both the strength and salience of identities related to that context (Burke & Stets, 2009). This may explain the American research findings indicating that participation in school sports is related to student identity and sport identity (e.g., Brewer, et al., 1993; Marsh & Kleitman, 2003; Sturm, et al., 2011).

The student identity can be considered an indication of the bonding of students to their school and their willingness to invest in their school work (Libbey, 2004; Osborne & Jones, 2011; Yopyk & Prentice, 2005). Sport identity can be defined as “the degree to which an individual identifies with the athlete role” (Brewer, et al., 1993, p. 237) and is an important determinant in long-term sport engagement (Curtis, et al., 1999; Downs & Ashton, 2011; Lau, et al., 2006).

Research has indicated that there are differences in sport-related identity formation between American and European adolescents (Brandl-Bredenbeck & Brettschneider, 1997; Curry & Weiss, 1989). This may have to do with the different cultural emphasis on sports and the differences in the way youth sport is organised. More specifically, in the Netherlands, some studies have indicated that sporting club membership influences the formation of identities related to sports (e.g., Vermeulen & Verweel, 2009). However, in contrast to American studies, no European studies have investigated the relationship between sport participation (either intra or extra-curricular) and student identity. This may be explained by the low integration of sports into the European educational system. Given the vast differences between the organisation and social functioning of youth sport in
the USA and European countries, and therefore the lack of contextually relevant research, this study sought to investigate how sport participation at a school campus might be different from sport participation at other locations in the Netherlands.

Although identity processes in Dutch sporting clubs might be different from those reported in American school sports, it can be hypothesised that participation in Dutch sporting clubs also affects identity processes. Therefore in the present study the student identity of students was used as an indication of school bonding. Sport identity was used as an indication of (the chances of) long-term sport engagement, as it was impossible to determine the actual long-term sport engagement of the students within the time-frame of this study.

As a result we sought to address the following research questions:

1. Is there a relationship between club sport participation and the strength and salience of student identity in the Netherlands?
2. Is there a relationship between club sport participation and the strength and salience of sport identity in the Netherlands?
3. Are these relationships influenced by whether the sporting club is co-located with a school campus?

Method

Research setting

The study was conducted at two schools co-located with a sporting campus in the Netherlands. One school provided preparation for vocational education and the other provided vocational education. Both schools were located in the same building which was built in the middle of existing football and baseball clubs. After the school opened, several other sporting clubs commenced activities at the campus, including gymnastics, fitness, beach volleyball and field hockey clubs. Although the campus was located in a neighbourhood with a low socioeconomic status, the population of the sporting clubs consisted of people from a broad cross-section of different ages, ethnic origins, educational levels and SES.

Even though the schools and the sporting clubs were located on the same campus, sport was not integrated into the curricular or extracurricular activities of the schools.

Respondents

One-hundred and fifty students of the schools on the campus participated in the study. Six respondents were excluded because they did not adequately complete
Another four respondents were involved in sporting clubs both on and away from the campus. Because this group was too small to include in the analysis, they were excluded. The remaining 140 students were divided into three groups based on their self-reported sport participation.

The first group consisted of students who did not participate in any form of sport (NS). This group consisted of eight male and 20 female participants with a mean (standard deviation in parenthesis) age of 15.88 (1.90). Twenty-one of these students were of foreign ethnic origin.

The second group consisted of students who participated in one of the sporting clubs located on the campus (SCC) \( (n = 37) \). Most of the respondents in this group were members of one of the fitness clubs \( (n = 10) \) or the football club on campus \( (n = 15) \). This group consisted of 23 male and 14 female participants with a mean age of 16.57 (1.48). Twenty students in this group were of foreign ethnic origin.

The third group consisted of students who exclusively played sports at other sporting clubs (OSC) not located on the campus \( (n = 75) \). This group consisted of 53 male and 22 female participants with a mean age of 16.54 (1.58). Twenty-five of these students were of foreign ethnic origin.

The proportions of male and female subjects \( (\chi^2(2) = 15.151; p < 0.01) \) and the proportion of students from Dutch and foreign ethnic origin \( (\chi^2(2) = 15.169; p < 0.01) \) were unequally divided across the groups. Therefore, sex and ethnic origin were controlled for in the statistical analysis.

**Procedure**

Students from six different classes were recruited by their PE teacher to participate in the study. This selection was based on the teaching schedule of the PE teacher, as it was the six classes the teacher had to teach on the day of the data collection. Therefore, the characteristics of the students did not play a role in selecting the respondents. The students were informed about the content and procedure of the study at the beginning of their lesson, after which they could sign an informed consent form. None of the students refused to participate. After giving their written consent, the students were asked to fill out a questionnaire. Data collection was performed by students from the School of Human Movement and Sports (Windesheim University of Applied Sciences) as part of a social and cultural exchange event. These students were instructed by the first author about the purpose and procedure of the data collection. Upon completion of the questionnaires, the students from the School of Human Movement and Sports provided a physical education lesson for the respondents. Because privacy regulations prevented the
collection of school population data, the PE teacher was asked to indicate whether the respondents in the study formed a representative sample. He estimated the respondents to be typical for the overall school population \((n = \pm 600)\) in terms of ethnic origin, sex and age.

**Measures**
The questionnaire contained questions about the demographic background of the respondents, their engagement in sports and physical activities, student and sport identity, and the salience of different role-identities.

**Student identity**
Student identity was operationalised as the sense of school membership that students experienced (Libbey, 2004) and was measured by the mean of a four-item adaptation of the Psychological Sense of School Membership (PSSM) (Goodenow, 1993). This adaptation included items such as: “I feel like a real part of my school” and “I am included in lots of activities at my school” and had a good internal consistency \((\alpha = 0.84)\). These questions had to be answered on a five-point Likert-type scale, ranging from “totally not true” to “totally true”. The PSSM was originally created for health practitioners to assess school membership, but was considered valid and reliable to measure the importance of school and school work for healthy high school students from a large variety of backgrounds (e.g., Goodenow, 1993; You, Ritchey, Furlong, Shochet, & Boman, 2011).

**Sport identity**
The sport identity of the students was measured using the mean of a five-item adaptation of the Athletic Identity Measurement Scale (AIMS) (Brewer, et al., 1993). This adaptation had a good internal consistency \((\alpha = 0.91)\). Although the AIMS was originally validated for college athletes and non-athletic college students (Brewer, et al., 1993), it has been validated to measure the role of sports in the life of athletes in different levels of competition, ranging from non-athletes and beginners to elite athletes (Cieslak, 2004). In addition, the AIMS has been used on younger children (Lau, et al., 2004, 2006).

Because ‘athlete’ in the Netherlands refers to a participant in track and field, the term ‘athlete’ was replaced by ‘sport’ in the questionnaire (see also Lau, et al., 2004). The scale included items such as “I consider myself a sportsman” and “Sport is the most important part of my life”. These items had to be answered on a seven-point Likert-type scale, ranging from “totally disagree” to “totally agree”.
A potential drawback of the PSSM and the AIMS is that they pretend to measure a single identity in isolation (Cieslak, 2004), whereas for most people different identities interact and interfere (Burke & Stets, 2009).

**Identity salience hierarchy**
The salience hierarchy of six different role-identities was measured by letting the respondents award a maximum of 100 points to each of the following six role-identities: family, friend, lover, religion, student, and sport (Cieslak, 2004). This method was proposed by Curry and Weaner (1987) in order to assess the relative importance of different identities that might be important to students. This method was previously found to have strong reliability (α = 0.90) (Curry & Weaner, 1987).

**Statistical Analysis**
One-way analyses of covariance (ANCOVAs) were used to compare the mean values of student identity and sport identity for the three groups. Sex and ethnic origin (dichotomised in Dutch or foreign) were found to be unequally distributed across the different groups and therefore could potentially confound the results (Field, 2009). In order to remove the possible bias of these variables, they were added as covariates to the ANCOVAs. Given the similarity of the levels and environments of the two schools, school was not considered to be a confounding variable and the students of the two schools were treated the same in the analysis. To compare the three sport participation groups, post hoc analyses were conducted. All analyses were performed using SPSS (version 17.0). Significance level was set at p < 0.05.

**Results**

**Student identity**
Students who played sports at a SCC did not differ significantly in their student identity ($M = 3.71, SD = 0.55, 95\% CI [3.49-3.94]$) from students who played at OSC ($M = 3.81, SD = 0.71, 95\% CI [3.63-3.95]$) and students who did not play sports at all ($M = 3.43, SD = 0.70, 95\% CI [3.19-3.74]$) after controlling for sex and ethnic origin ($F(2, 133) = 1.923, \text{ns}$). In addition, there were no significant differences in the student identity of students who played at OSC, 95\% CI [3.63-3.95], and students who did not play sports at all, 95\% CI [3.19-3.74] (see Table 7.1). This means that the very act of playing sports was not related to the student identity, as students who participated in sport did not differ from the non-sporting students in their student identity. Furthermore, the location of the sporting club, either at the campus or
not, was not related to the importance of school and school work.

**Table 7.1:** Means, (standard deviation) and [95% confidence interval] for student and sport identity scores of three groups of students (NS = No Sports; SCC = Sporting clubs at the Campus; OSC = Other Sporting clubs).

<table>
<thead>
<tr>
<th></th>
<th>Student Identity</th>
<th></th>
<th>Sport Identity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NS</strong> (n = 28)</td>
<td>3.43 (0.70) [3.19-3.74]</td>
<td>3.21 (1.39) [2.93-3.87]†</td>
<td></td>
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</tr>
<tr>
<td><strong>SCC</strong> (n = 37)</td>
<td>3.71 (0.55) [3.49-3.94]</td>
<td>4.89 (1.29) [4.47-5.23]*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OSC</strong> (n = 75)</td>
<td>3.81 (0.71) [3.63-3.95]</td>
<td>5.26 (1.07) [4.93-5.48]†</td>
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</table>

*Note.* * and † indicate significantly different means at \( p < 0.001.\)

**Sport identity**

The ANCOVA on sport identity revealed a significant main effect of sporting club participation after controlling for the influence of sex and ethnic origin \( (F(2, 133) = 20.042, p < 0.001) \) (see Table 7.1). Planned contrasts revealed that students who participated in OSC \( (M = 5.26, SD = 1.07) \) \( (p < 0.001, 95\% \text{ CI [4.93-5.48]}) \) and students who played at SCC \( (M = 4.87, SD = 1.29) \) \( (p < 0.001, 95\% \text{ CI [4.47-5.23]}) \) had a significantly higher sport identity compared with students who did not play sport at all \( (M = 3.21, SD = 1.39) \) \( (95\% \text{ CI [2.93-3.87]}) \). There were no significant differences between students who participated in SCC and OSC. This indicates that playing sports was related to a stronger sport identity, as students participating in sports had a stronger sport identity compared to students not participating. However, the location of the sporting club was not important for the significance of sport in the lives of students, since students participating in SCC did not differ in their sport identity from students participating in OSC.

**Identity salience hierarchy**

Table 7.2 shows the salience hierarchy for the six different role-identities across the three groups of students. For students who did not play sports at all, sport identity was ranked as the identity with the lowest importance. On average, students who played sports at a SCC or an OSC ranked their sport identity in fourth place. This means that students who were engaged in sports considered sports to be relatively important for their self-concept compared to other social identities. All groups ranked their student identity third. This indicates that playing sports, regardless of the location, was unrelated to the relative importance of the student identity.
Table 7.2: Mean rank order of role-identity salience of the three groups of respondents ($n = 140$).

<table>
<thead>
<tr>
<th>No Sport</th>
<th>Sporting clubs at the Campus</th>
<th>Other Sporting clubs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family</td>
<td>Family</td>
</tr>
<tr>
<td>2</td>
<td>Religion</td>
<td>Friend</td>
</tr>
<tr>
<td>3</td>
<td>Student</td>
<td>Student</td>
</tr>
<tr>
<td>4</td>
<td>Friend</td>
<td>Sport</td>
</tr>
<tr>
<td>5</td>
<td>Lover</td>
<td>Lover</td>
</tr>
<tr>
<td>6</td>
<td>Sport</td>
<td>Religion</td>
</tr>
</tbody>
</table>

Interestingly, students who did not participate in sports ranked their religious identity relatively high compared to the sporting students. This is in line with a previous study on the sport identity of religious students, showing a relative importance of religion for religious college students (Curry & Parr, 1988). In the present study, this finding could be explained by the high percentage of female students with non-western ethnic backgrounds (75%) in this group. Research indicated that this demographic of female students are known for their low levels of sport participation, while also placing relatively high importance on religion (e.g., Knop, Theeboom, Wittock, & Martelaer, 1996).

Discussion and conclusion

Dutch policy-makers suggested that the integration between school and sport is related to the level of school bonding and long-term sport engagement experienced by school students (Ministry of VWS, 2008a; Ministry of VWS & Ministry of OCW, 2008). They substantiated these claims by citing American studies that examined interscholastic school sports. As the social functioning and organisation of school sport in the Netherlands and other European countries differs markedly from that in America, there is a lack of contextually relevant research on school sports in Europe. Therefore, the present study was conducted to give some insight in the relationship between sport participation, school bonding and long-term sport engagement in the Netherlands. In addition, it was questioned whether this possible relationship was different for students playing sports in the same location as the school or at another different location. These questions were investigated by comparing the student identity and sport identity of students not playing sports at all (NS), students playing sports at sporting clubs at a campus (SCC), and students playing sports at sporting clubs located elsewhere (OSC).
The three groups of respondents in this study did not differ in their student identity. Further, in the salience hierarchy there were no differences in the importance of the student identity between the three groups. These results show that involvement in sports per se, either on the school campus or at another location, cannot be associated with the strength and salience of the student identity. Since student identity was used as a measure of school bonding in this study, these results suggest that playing sports, either on the campus or at other sporting clubs, is not related to school bonding. This is in clear contrast to Dutch sports policy that suggests that locating sport and school facilities on the same campus should be related to school bonding and a stronger emphasis on school and school work. This expectation was based on American studies showing a relationship between school sport participation and school bonding (e.g., Jordan, 1999; Marsh & Kleitman, 2003). The differences between the present findings and those from the USA might be explained by the specific organisational structure and social functioning of school sports in American high schools (Pot & Hilvoorde, 2013). The present results suggest that the mere proximity of a school and sporting facilities in the Netherlands is not enough to facilitate enhanced school bonding.

The results showed that sport involvement was related to a strong sport identity. However, no differences in sport identity were found between students involved in SCC and students involved in OSC. Also, in the salience hierarchy students engaged in SCNC and OSC ranked their sport identity higher than students who were not involved in sports. The correlation between sport participation and a strong sport identity is in agreement with earlier findings (e.g., Brewer, et al., 1993; Cieslak, 2004; Lau, et al., 2004; Sturm, et al., 2011). The absence of differences in the sport identity of students involved in SCC and OSC is also consistent with a previous study (Lau, et al., 2004) that found no relationship between sport identity and the sporting environment of the school (including the proximity of the school to sporting facilities). This means that the location where sport participation takes place, be it on the campus or not, was not related to the centrality of sport in the lives of the students. Since sport identity was used as an indication of the chances of long-term sport engagement, the present results suggest that playing sports on the campus was not differently related to long-term engagement in sports compared with playing sports at other sporting clubs. However, it could be that the sporting facilities on the campus convinced some students to start participating in sports, as they would otherwise have been discouraged by the time investment needed to travel to another sporting club located away from their school (and home) (e.g., Humbert, et al., 2006). This might particularly be the case in neighbourhoods with a lower socioeconomic status as sport participation.
rates tend to be lower in those neighbourhoods (Tiessen-Raaphorst, et al., 2010; Tuyckom & Scheerder, 2010). Future research on the motivations for participating in these sporting clubs on the campus could help to test this hypothesis.

In summary, the strength and salience of sport identity was related to participation in sporting clubs, whereas student identity was not. In addition, the location of the sporting clubs, either on or away from the school campus, did not affect this relationship.

As the nature of the present study was cross-sectional, no causal relationships could be established. In addition, the small sample of students from one campus limits the possibilities for generalisation of the conclusions. However, the findings give some insight into sport participation and the location of sporting clubs, and their collective relationship with school bonding and (long-term) sport participation. Our findings question the policy expectations (Ministry of VWS, 2008a; Ministry of VWS & Ministry of OCW, 2008) that the mere proximity of sporting facilities to a school is in itself sufficient for sporting clubs on a campus to have outcomes above and beyond those possible from sports clubs not located on campus. It is therefore suggested that other elements of school sports, such as the integration of sports within the curricular or extracurricular program, and the social functioning of school sports, might be crucial for sports to have an impact on the level of school bonding similar to that found in American studies (e.g., Jordan, 1999; Marsh & Kleitman, 2003). The Dutch policy-makers appear to neglect the absence of these other elements of American school sports by basing their expectation of the collaborations between school and sports in the Netherlands on American studies on interscholastic school sports. It could even be argued that the collaborations between school and sport in the Netherlands cannot be defined as school sports, as most of them are interwoven into the club sport system.

However, the integration between school and sport in the Netherlands, and the infrastructure that emerged simultaneously, do appear to offer possibilities for more interaction between school and sport by encouraging more engagement of schools in sport events and a stronger integration of sports into the school curriculum. This could enhance the future chances of realising school-related outcomes from these collaborations including enhanced school bonding, greater investment in school work, decreased drop-out rates, and they might convince some student to start playing sports.

In conclusion, on-campus sporting clubs in the Netherlands should be regarded as regular sporting clubs that ‘happen to be’ at the school campus. They do not seem to provide any particular advantage in terms of school bonding or long-term sport engagement when compared to other sporting clubs.