

Brief report: Performing on the stage, the field, or both?

Australian adolescent extracurricular activity participation and self-concept

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Abstract

The relationship between Australian adolescents' participation in extracurricular activities and their self-concepts was investigated. A total of 1489 adolescents (56% female; mean age 13.8 years) completed measures of social self-concept, academic self-concept, and general self-worth, and reported on their extracurricular activity participation. In general, participation in any type of extracurricular activity was associated with a higher social and academic self-concept, and general self-worth, compared to no participation. Adolescents who participated in both sports and non-sports also reported a more positive social self-concept and general self-worth, compared to those who only participated in one of the activity types. This research provides support for extracurricular activities as a context facilitative of positive self-concept, and demonstrates the importance of a mixed participation profile for an adolescent's self-concept.

Keywords: Adolescent self-concept; Extracurricular activity participation; Sports

The development of social and academic competence is considered to be a fundamental 'project' of adolescence. While research is limited in this area, it appears that extracurricular activities are a possible context for the facilitation of positive self-worth and self-concept in adolescents. Self-worth refers to an individual's evaluative opinion of themselves in general (Harter, 1999 and Marsh and Hattie, 1996), with a positive self-worth appearing to both protect and support healthy adolescent development (Gilman and Huebner, 2006, Steinhausen and Metzke, 2001 and Torres and Fernandez, 1995). Self-concept, defined as a collection of knowledge structures about the self, is widely acknowledged to be a multidimensional construct including domains such as academic, social, behavioural conduct, and physical self-concept (Harter, 1999). These separate components of self-concept jointly influence self-worth, and individually predict specific developmental indicators. For example, academic self-concept is consistently related to numerous academic outcomes, whereas there is a weaker relationship between such outcomes and non-academic domains of self-concept (Marsh & Craven, 1997).

Participation in structured extracurricular activities, such as drama, academic clubs, and sports, provides important opportunities for development during adolescence (Mahoney, Larson, Eccles, & Lord, 2005). A number of studies investigating the outcomes associated with adolescent extracurricular activity participation have found a positive relationship between participation and measures of general self-esteem or self-worth (e.g., Eccles and Barber, 1999, Fredricks and Eccles, 2005, Fredricks and Eccles, 2006 and Gadbois and Bowker, 2007). However, research examining extracurricular activity participation and more specific dimensions of self-concept are minimal. In one exception, Marsh found participation in extracurricular activities to be associated with increased academic and social self-concept, after controlling for background variables and initial levels of self-concept (Marsh, 1992a). Marsh's research, while based on a large and representative sample of adolescents, used a single quantitative measure of total extracurricular activity participation. With such a measure, self-concept advantages associated with participation in specific types of extracurricular activities cannot be identified.

The developmental indicators associated with structured extracurricular activity participation have been found to vary depending on the type of activity in which an adolescent participates (Feldman & Matjasko, 2005). For example, participation in sports has been associated with increased school engagement and lower levels of depression (Eccles and Barber, 1999 and Fredricks and Eccles, 2005), performing arts have been linked to lower alcohol use (Fredricks & Eccles, 2005), and participation in school clubs predicts later civic engagement (Fredricks & Eccles, 2006). Feldman and Matjasko (2007) have extended research in this area by investigating *portfolios* of extracurricular activity participation. Using the Adolescent Health data set, these researchers identified 26 possible combinations of activity participation. Adolescent's extracurricular activity participation was then categorized into 6 mutually exclusive participation portfolios (Feldman & Matjasko, 2007). Adolescents were coded as either participating in sports only, academics only, school only, performance only, multiple activity types, and non-participation (Feldman & Matjasko, 2007). Just under half their sample participated in multiple activity types (43.2%), with that combination profile, and the academic-only profile, associated with significantly higher academic achievement than the other profiles of participation. Within the multiple activity type profile, the majority of the possible combinations included a sport, with Feldman and Matjasko (2007) recommending future research focus on sports participation that occurs in conjunction with other kinds of activities. Participation in a combination of activity types appears to provide benefits above and beyond those related to participation in one activity type (Bartko & Eccles, 2003; Feldman & Matjasko, 2007). However, research is yet to explore whether different extracurricular activity portfolios are associated with specific dimensions of self-concept.

Based on the research summarized, the current study investigated the relationship between four different extracurricular activity portfolios (*no participation, activities-only, sports-only, and mixed participation*) and academic self-concept, social self-concept, and general self-worth. Given Feldman and Matjasko's (2007) recommendations, our research focused on categorizing activities based on whether they were a sport or not, in order to consider the unique versus combined roles of sport and non-sport activities. It was hypothesized that any form of extracurricular activity participation would

be associated with higher academic and social self-concept, and general self-worth, compared to no participation. Furthermore, it was hypothesized that adolescents classified into the *mixed participation* portfolio would have higher academic and social self-concepts, and general self-worth, compared to adolescents in the *activities-only* portfolio or the *sports-only* portfolio. As gender differences are common for self-worth and self-concept (Harter, 1999), and different types of activity participation may hold different meaning for males and females, interactions of participation and gender were also investigated.

Method

Participants

Participants were drawn from 26 high schools, both government and non-government, selected to represent the four metropolitan school districts and five regional school districts across Western Australia. The number and type of schools (government, non-government) selected within each district was determined by the high school student enrolment rates for each district. The sample consisted of 1489 adolescents (56% female), 919 in year 8 and 570 in year 10. The mean age of the participants was 13.8 years ($SD = 1.02$ years) and ranged from 12 to 16 years. Just over half the participants (51.5%) were drawn from non-government high schools, which is somewhat higher than the state average (41%, Australian Bureau of Statistics [ABS], 2007). The other 48.5% of participants attended government high schools (State average is 59%, ABS, 2007). Indigenous students comprised 1.3% of the sample, lower than the national Indigenous high school student population (3.6%, ABS, 2007).

Measures

Extracurricular activity participation Based on previous extracurricular activity research (Eccles and Barber, 1999 and Feldman and Matjasko, 2007) and Australian pilot testing, participants were provided with a list of 30 sports (e.g., basketball, netball, swimming) and 24 non-sport activities (e.g.,

band, school council, drama club), with space at the end of each list to add activities. Participants were asked to check off all structured/organized activities that they were involved in during the school year, outside of school hours. An extracurricular activity portfolio variable containing four categories was created; adolescents who did not participate in any extracurricular activities were coded as *no participation* (9.3%); adolescents who only participated in non-sport activities were coded as *activities-only* (8.3%); adolescents who only participated in sport activities were coded as *sports-only* (38.4%); and adolescents who participated in at least one sport and one non-sport were coded as *mixed participation* (44%).

Academic and social self-concept, general self-worth The correlations between each measure of self-concept and descriptive statistics for each scale are presented in Table 1. Items within each scale started with the stem 'How true is this statement about you?' and were assessed on a 6 point Likert scale (1: False, not like me at all; 6: True, this describes me very well). Items were drawn and adapted from existing measures (Marsh, 1992b, Marsh, 1992c and Marsh, 1992d). Academic self-concept was measured with 3 items including "I have the ability to be good at most school subjects if I try." The measure of social self-concept consisted of 3 items, including "I am very good at making friends." General self-worth was measured with 4 items, including "A lot of things about me are good."

Procedure

Informed parent and student consent was required to participate. Participants completed the measures as part of a larger research project, the Youth Activity Participation Study of Western Australia (YAPS-WA), investigating Australian adolescents' experiences during their leisure time. The entire questionnaire took approximately 40 min to complete, and according to each school's preference, was either administered via laptop computers connected to a wireless intranet, or in an equivalent paper and pencil format.

Results

A 2 (gender) by 4 (activity portfolio) ANOVA was conducted for academic self-concept, social self-concept, and general self-worth, with Bonferroni adjusted pairwise comparisons used to investigate significant main effects (see Table 2).

Academic self-concept

A main effect of portfolio was found for academic self-concept ($F(3,1448) = 16.57, p < .001$). Pairwise comparisons revealed academic self-concept to be significantly higher for adolescents with *mixed participation* portfolios compared to those with *sports-only* and *no participation* portfolios. Academic self-concept was also significantly higher for adolescents with *activities-only* portfolios, compared to adolescents with *no participation* portfolios. Neither the main effect of gender ($F(1,1448) = 0.02, p > .05$), nor the interaction effect was significant ($F(3,1448) = 0.74, p > .05$).

Social self-concept

The activity portfolio main effect was also significant for social self-concept ($F(3,1448) = 9.90, p < .001$). Adolescents with *mixed participation* portfolios had a higher social self-concept than adolescents with the three other portfolios. Social self-concept was also significantly higher for adolescents with *sports-only* portfolios, compared to adolescents with *no participation* portfolios. The main effect of gender was significant, with females having a higher social self-concept than males (Females, $n = 817, M = 4.7, SD = 0.94$; Males, $n = 639, M = 4.4, SD = 0.99$; $F(1,1448) = 16.75, p < .001$). The interaction was not significant ($F(3,1448) = 2.59, p > .05$).

General self-worth

A main effect of portfolio was also found for general self-worth ($F(3,1452) = 19.79, p < .001$). Adolescents with *mixed participation* portfolios had a significantly higher general self-worth compared to adolescents with the three other portfolios. Adolescents with *sports-only* and *activities-*

only portfolios had significantly higher general self-worth compared to adolescents with *no participation* portfolios. No main effect of gender ($F(1,1452) = 0.52, p > .05$), or interaction effect was found ($F(3,1452) = 1.35, p > .05$).

Discussion

The first hypothesis was generally supported and results were consistent with previous research, with extracurricular activity participation being associated with higher social and academic self-concepts, and general self-worth (Marsh, 1992a). In support of the second hypothesis, the mixed participation profile, representing just under half the sample, was associated with higher self-concepts, compared to the single activity type profiles. Although Bartko and Eccles (2003) and Feldman and Matjasko (2007) have previously identified more positive outcomes associated with mixed participation profiles, their studies did not focus on adolescent self-concepts. Our contribution to the activity portfolio literature is demonstrating that youth with a combination of activity types have higher social self-concepts and general self-worth compared not only to those with no activities, but also to those who participate in only one type of activity.

The apparent benefit associated with a mixed participation profile over single activity type profiles may be explained by the experiences that occur during activity participation. Larson and colleagues (Hansen et al., 2003 and Larson et al., 2006) have identified a number of positive personal and interpersonal developmental experiences that occur during extracurricular activity participation, including opportunities to use initiative, enhance social capital, and explore identity. The type of experience, and degree to which the experiences occurred, varied depending on the type of activity in which the adolescent participated (Hansen et al., 2003; Larson et al., 2006). For example, participation in sports and arts activities provided adolescents with greater initiative experiences, while participation in service activities, such as volunteering, provided more teamwork and social capital experiences (Larson et al., 2006). It may be the case that adolescents with a mixed

participation profile are exposed to a greater variety of developmental experiences, which in turn help facilitate more positive self-concepts.

The current study, like other cross-sectional research in this area, is limited by the possible confound of self-selection. The positive outcomes associated with extracurricular activity participation, in this case self-concept, may be due to adolescents with more positive self-concepts choosing to participate in extracurricular activities, rather than extracurricular activity participation influencing self-concept. However, longitudinal research controlling for multiple personal characteristics indicates developmental outcomes are at least partially a product of extracurricular activity participation (Eccles and Barber, 1999 and Marsh, 1992a). Therefore it is not unwarranted to suggest extracurricular activities provide a context that may be facilitative of positive self-concept. In fact, research investigating the developmental experiences that occur during extracurricular participation has found such participation to provide a variety of positive identity-related experiences (Hansen et al., 2003 and Larson et al., 2006). Future research should investigate the relationship between extracurricular activity participation profiles and other dimensions of the self-concept, across a wider age range, allowing for a better understanding of the contribution activity participation may make to the development of a healthy self-concept across adolescence. As the development of social and academic competence is of paramount importance during adolescence, it is crucial to identify contexts that are facilitative of such competence. Interest in extracurricular participation has been growing because of its promise in this regard, and our results offer another window into the complexity of these connections.

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Table 1. Correlations between self-concept scales and descriptive statistics ($N = 1474$).

	Academic self-concept	Social self-concept	General self-worth
Academic self-concept	–	–	–
Social self-concept	.46**	–	–
General self-worth	.70**	.60**	–
Mean	4.79	4.67	4.54
<i>SD</i>	0.91	0.96	0.9
Alpha	0.79	0.75	0.82

** $p < .01$.

Table 2. Means (and standard deviations) of social and academic self-concept, and general self-worth by extracurricular activity portfolio ($N = 1460$).

	No participation	Activities-only	Sports-only	Mixed participation
Academic self-concept	4.5a (1.10)	4.8b, c (0.95)	4.7a<, b (0.89)	5.0c(0.82)
Social self-concept	4.3a(1.14)	4.5a, b (1.03)	4.6b (0.95)	4.8c (0.90)
General self-worth	4.1a (0.98)	4.4b (0.91)	4.5b (0.90)	4.7c (0.85)

Note: Means in the same row that do not share subscripts differ at $p < .05$.