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Research Article

Extracurricular Participation and its Correlates among Chinese College Students

Abstract

Aims: The aim of this study was to identify the factors that influence the participation in extracurricular activities of Chinese university students

Methods: We used data collected in surveys on a university campus in Beijing China from 2007 to 2011. Extracurricular participation is a self-reported item, and the independent variables include the students' demographics and measures psychopathology.

Results: Demographic variables such as gender, political affiliation, and leadership participation, and psychological factors such as depression, social support and satisfaction with major were all associated with extracurricular participation.

Conclusions: A lower level of extracurricular participation was related to higher scores on a measure of depression. Since students' participation in extracurricular activities can improve college students' mental health, extracurricular activities should be promoted on Chinese college campuses.

Introduction

Population studies of exercise behavior from Australia, New Zealand and North America have found that 25%–30% of adults are sedentary in their leisure time [1], and evaluations of recent nationwide campaigns in Australia suggest the need for a realistic awareness of what can and cannot be achieved by mass-media information and persuasion to encourage sedentary people to be more active [1]. The place to start with establishing an active life style is in the schools and universities.

In schools, extracurricular activities include all types of educational and entertainment activities performed outside of the classroom. Extracurricular activities are an important part of the school experience and can facilitate the healthy development of students. Participation in school extracurricular activities is associated with reduced rates of early dropout and criminal arrest among high-risk males and females, but this decline in antisocial patterns may be dependent on whether the individual's social network also participates in the extracurricular activities [2].

The participation of college students in extracurricular activities has a significant influence on their physical and psychological health. Sport is a major leisure activity among adolescents in most western societies. In Norway, 72% of adolescents reported that they were past or present members of a sports team [3]. Sport can help people become physically strong, and there is unanimous agreement that physical activity is "a good thing" [4]. It has been suggested that participating in sport during adolescence may prevent problem behaviors [5], including those that are illegal or violate societal norms such as criminal behavior, conduct problems, sex during adolescence, and drug use [6]. There is evidence that physical activity has a protective effect against cardiovascular disease [7]. Therefore, it

seems to be important to encourage adolescents to engage in sports activity since these habits may persist into adulthood [8]. On the other hand, sports participation in adolescence, and participation in team sports in particular, may increase the incidence of alcohol intoxication during late adolescent and early adult years, even though participation in team sports and endurance sports may reduce the later use of tobacco and cannabis.

Sports participation takes time, in particular if there is pressure for outstanding performance. In many cases, the number of competitions also increases during adolescence. When the time spent on training and competing increases, there is less time for other activities, among them activities associated with alcohol and drug use [6]. Physical activity promotes positive emotional well-being [9] including improvements in depressed mood [10], anxiety and stress [11], and self-esteem. Alyce and Thomas, found that students in smaller schools participate in a greater number and variety of extracurricular activities than students in larger schools. Furthermore, low-ability and lower SES students are more involved in school life in smaller schools [12]. School size and poverty levels significantly influence the number and types of activities available, with larger schools and those schools with more affluent student bodies offering more activities. In addition, schools with more activities available tend to have higher participation rates [13].

Most of the research on these issues has been conducted in the West, but some research is appearing on extracurricular participation by college students in China. Extracurricular participation is viewed an important way of training the practical ability of students, an important supplement to classroom teaching [14]. In particular, there is some evidence that sports activities can develop the students' physical and mental health [15]. For example, sports participation

improves the students' ability to handle interpersonal crises and develop emotional control [16]. However, not every student participates in sports and other extracurricular activities. In general, females have lower participation in such activities than do males, a result perhaps of lack of time, the financial cost, lack of sports equipment, lack of guidance, and laziness [17]. Those economically better-off seem to be more willing to take part in extracurricular activities [18].

Given the importance of extracurricular participation in colleges, it is necessary to identify the correlates of students' participation and advise school administrations in terms of enhancing this healthy and positive behavior of college students. The present study was designed to study the degree to which Chinese college students participate in extracurricular activities and what factors affect participation, in order to inform educational policy makers on how to increase the participation of students in extracurricular activities. We predicted that demographic variables such as gender, political affiliation and leadership participation, as well as psychological factors such as depression, social support and satisfaction with major will be related to extracurricular participation.

Method

The sample

Survey data were collected on a university campus in Beijing, China, from 2007 to 2011. It was a research university with an undergraduate population of about 8,000. Each year in October and November, the survey was administered to a randomly selected sample of students (less than 1,000) on campus. The protocol was approved by the Internal Review Board (IRB) and informed consent was obtained from each student before they started to participate. With the administrative assistance, the response rate was about 90% each year. The questionnaire survey included questions on demographic information and other variables: gender, year in college, hometown location, only child status in the family, political affiliation, leadership participation, and satisfaction with the major chosen for study, depression, and social support.

Table 1 describes the sample. The sample size was 3,778, of whom 37% were male. Their ages ranged between 15 and 26 years, and 30% were freshmen. There were more students from urban areas (81%) than from rural areas and more students from one-child families (68%) than from multiple-children families. Only 16% of the students were Communist Party members. About three-quarters (76%) of the students participated in some leadership role in classes, and just over half of the students had clear career goals (58%).

The measurements

Year in College: Out of the four years in which the sampled undergraduate students were distributed, the sample was categorized into freshmen and non-freshmen. The category of non-freshmen included sophomores, juniors, and seniors. We separated freshmen from others for comparison because they are usually less experienced with college life and the environment there than others.

Hometown Location: the question on this variable in the questionnaire was, "Where is your family before you entered into the college?" The choices for answer were urban or rural.

Only Child Status: Students were asked in the questionnaire how many siblings they had in their family. If the student was the only child of their parents, he/she was categorized as the only child status, otherwise, as a not only child.

Political Affiliation: There were four choices of answer to the question about the political affiliation: 1=Communist Party; 2=Communist League; 3=Other Parties; 4=Non-party. The Communist Party members were separated from all others for comparison in this study.

Leadership Participation: The question about whether the student has participated or has been participating in a leadership role in any student activity, with the answer yes or no.

Satisfaction with Major: The question for this variable was, "Are you satisfied with your selected major?" There were five choices for a response: 1=very satisfied; 2=satisfied; 3=not sure; 4=not satisfied; 5=very unsatisfied. The scoring was reversed so that, the higher the score, the higher the satisfaction of major. We treated this variable as a continuous variable in the study.

The Center for Epidemiological Studies Depression (CES-D) [19], is a commonly used scale to measure depressive symptoms [20]. The CES-D is a 20-item self-report scale, covering affective, cognitive, behavioral, and somatic symptoms associated with depression [21]. Unlike many scales of depression that were originally designed for clinical populations, the CES-D was designed for use in the general population [22]. As in the original form of the instrument, respondents were asked to indicate the frequency of the symptoms in the past week using a 4-point scale: 0=less than a day; 1=1 to 2 days; 2=3 to 4 days; and 3=5 to 7 days [19]. In the questionnaire for the data collection in the current study, there is a small change in the response pattern. It is changed to an 8-point scale to describe the frequency of the symptoms instead of 4-point scale: 0=never; 1=one day; 2=two days; 3=three days; 4=four days; 5=five days; 6=six days; 7=seven days against a time frame of the past week. The 4 positively formulated items (items 4, 8, 15 and 20) were re coded in reverse. The possible total score consists of a sum of all 20 items, ranging from 0 to 140. The higher the score is, the stronger the depression.

Social Support: Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) [23]. The MSPSS has 12 items in three subscales: subjective support, objective support, and utility of support. Because of its brevity, it has been used in different populations in China to study the relationship between social support and suicidal ideation [24,25], depression and anxiety [26], in college students, railroad workers [27], and rural young women aged 15–39 [28]. The social support uses a 7-point scale to describe the degree of agreement with the statements. In this scale, no items need to be recoded in reverse. The possible total score ranges from 12 to 84. The higher the score is, the stronger the social support.

Extracurricular Participation: Students were asked "How often do you participate in extracurricular activities?" Responses were scored: 1=Never or rarely participate in activities; 2=Sometimes; 3=Often; 4=Every time. The mean score for this variable was 3.04 (SD = 0.795)

Results

The results are shown in **Table 1**. Men and women did not differ in their participation in extracurricular activities, nor did students from urban versus rural areas. However, freshmen participated more in extracurricular activities, as did those students from one-child families, communist party members and those in leadership positions in classes.

Participation in extracurricular activities was positively associated with scores on the measure of social support (Pearson $r = 0.14$, $p < .001$) and with satisfaction with the chosen major ($r = 0.11$, $p < .001$), and negatively associated the scores for depression ($r = -0.17$, $p < .001$).

Table 1: Description of the Variables on the Extracurricular Participation [N=3,778].

Variable	f (%)	Mean	Std.	t	p
Gender				0.243	0.808
Male	1,387 (36.8)	3.04	0.802		
Female	2,387 (63.2)	3.04	0.790		
Year in College				2.163	0.031
Freshmen	1,120 (30.1)	3.08	0.800		
Not Freshmen	2,603 (69.9)	3.02	0.790		
Hometown Location				-0.142	0.887
Urban	3,024 (80.5)	3.04	0.773		
Rural	732 (19.5)	3.04	0.773		
Only Child Status				2.521	0.012
Only One Child	2,538 (67.5)	3.06	0.792		
Not Only One Child	1,221 (32.5)	2.99	0.798		
Political Affiliation				6.864	< 0.001
Party member	616 (16.4)	3.24	0.709		
Not Party member	3,134 (83.6)	3.00	0.806		
Leadership Participation				11.345	< 0.001
Yes	2,826 (76.2)	3.12	0.766		
No	883 (23.8)	2.78	0.826		
Satisfaction with Major		3.54	0.910	0.109	< 0.001
Depression (CES-D)		26.70	20.382	-0.172	< 0.001
Social Support (MSPSS)		65.10	11.852	0.142	< 0.001
Extracurricular participation		3.04	0.795		
1=Never	118 (3.1)				
2=Sometimes	767 (20.3)				
3=Often	1,742 (46.1)				
4=Every day	1,151 (30.5)				

Table 2: Regression Analysis of the Influencing Factors of the Extracurricular Participation among College Students.

Extracurricular Participation	Beta	Std. error	t	p
Gender (Female)	-0.035	0.031	-1.843	0.065
Year in College (Not freshmen)	-0.010	0.033	-0.531	0.596
Only Child Status (No)	-0.031	0.037	-1.399	0.162
Hometown Location (Rural)	0.024	0.044	1.080	0.280
Social Support	0.059	0.001	2.838	0.005
Political Affiliation (No)	-0.095	0.040	-4.934	< 0.001
Leadership Participation (No)	-0.154	0.036	-8.013	< 0.001
Satisfaction with Major	0.067	0.017	3.486	< 0.001
Depression	-0.131	0.001	-6.351	< 0.001

Note: $F=24.823$ $R^2=0.079$.

Regression analysis

The multiple regression analysis allows an examination of the effect of each correlate on the extracurricular participation while all other being held constant. As is shown in **Table 2**, gender (beta = -0.035, $p = 0.065$ SE= 0.031) had an almost significant effect with male students more likely than the females to participate in extracurricular activities. For the variable of political affiliation (beta = -0.095, $p < 0.001$ SE= 0.040), compared to the party members (party members = 1), the participation of non-party members in extracurricular activities was lower by 9.5%, a significant difference. The extracurricular participation of the students who have never been in leadership on campus was lower by 15.4% (beta= -0.154, $p < 0.001$ SE= 0.036) than the students who have been in a class leadership position.

From **Table 2** we can see that if, the depression scores increased one unit, extracurricular participation declined by 13.1% (beta= -0.131, $p < 0.001$ SE= 0.001). There was a significant positive relationship between social support and extracurricular participation (beta= 0.059, $p = 0.005$ SE= 0.001). If social support increased one unit, extracurricular participation increased 5.9%. Satisfaction with major had a significant positive effect on extracurricular participation too (beta= 0.067, $p < 0.001$ SE= 0.017).

If satisfaction with the major increased one unit, extracurricular participation increased 6.7%. The higher major satisfaction, the higher extracurricular participation. Perhaps higher satisfaction with the major gives students more pleasure and more confidence for their future employment. The result of this is less depression and higher participation in extracurricular activities. In recent years in China, with the rapid development of the economy, there is increasingly intense competition, and the pressure to obtain employment has become the main source of psychological pressure for university students. There is a significant correlation between employment pressure and the mental health, such that the greater employment pressure college students feel, the more intense depression they experience [29].

As **Table 2** shows, being a freshman (beta= -0.010, SE= 0.033, $p = 0.596$), being an only child (beta= -0.031, SE= 0.037, $p = 0.162$) and being a rural student (beta= 0.024, SE= 0.044, $p = 0.280$) were not significantly associated with participation in extracurricular activities.

Discussion

In the present study we found that many factors independently affect the participation of university students in China in extracurricular activities. Men, Communist party members, students who had been in leadership positions, those who were satisfied with their choice of major, those with more social support and those who were less depressed participated more in extracurricular activities. Although in the bivariate analysis, first year students, only children and rural students participated more in extracurricular activities, these variables did not play a role in the multiple regression analysis.

The lesser participation of women in extracurricular activities may reflect the persistence of Confucian values which denigrate the role of women in society, making them submissive to men and less entrepreneurial in the society, even though modern Communist values stress the equality of men and women. The greater participation of Communist party members in extracurricular may be a result of



their increased motivation to succeed in Chinese society where party membership may facilitate advancement.

The present study investigated the role of psychological factors, such as depression, for the first time in Chinese research on this issue. The negative association has several possible causes. It may be that depressed students are less likely to participate in extracurricular activities or, alternatively, it may be that participation in extracurricular activities reduces the level of depression in students. Future research using measures at two or more time periods may clarify which of these two possibilities has more merit.

Greater participation in extracurricular activities has the potential to have a positive impact on students and the schools. On the one hand, it can improve the incentives provided by the university and thereby improve the educational excellence of the school. On the other hand, it can improve the students' performance and communication skills, help the students develop a positive attitude to life, and relieve the stress of university study.

It would benefit universities to promote the engagement of students in extracurricular activities. They could reward the students who actively participate in extracurricular activities in order to motivate other students to join the extracurricular activities. For example, an additional transcript could be provided to students listing their participation in extracurricular activities which they could show potential employers along with their academic transcript.

This study had several limitations. First, it did not explore which extracurricular activities are associated with the variables studied. For example, does participation in sports have the same correlates as participation in intellectual or social activities? Second, the cross-sectional design (a study at one point in time) did not permit cause-and-effect conclusions to be drawn. However, the results may provide a stimulus to further research on this topic.

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