Data Article

Dataset on the effect of extracurricular activities on positive youth development

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\textbf{A R T I C L E   I N F O}

\textbf{Article history:}
Received 27 May 2021
Revised 25 August 2021
Accepted 30 August 2021
Available online 11 September 2021

\textbf{Keywords:}
Extracurricular activities
Positive development
Youths
Adolescents

\textbf{A B S T R A C T}

This article present dataset that reflects the perception of extracurricular activities and positive development among youth at 12 schools in Vietnam. In addition, the dataset also explores the relationship between extracurricular activities and positive youth development in Vietnam context. The dataset was collected from adolescents living in three provinces in Vietnam, including: Ha Noi, Nam Dinh, Nghe An and took place in March 2021. The final dataset included 416 fulfilled responses and was used for quantitative analysis through three steps, including: test coefficient alpha, exploratory factors analysis; confirming factors analysis; structural equation modelling. The dataset was obtained as a reference source for future research on positive youth development.

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https://doi.org/10.1016/j.dib.2021.107363
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Specifications Table

| Subject          | Psychology                                      |
|------------------|-------------------------------------------------|
| Specific subject area | Developmental Psychology                      |
| Type of data     | Table                                           |
| How data were acquired | Survey, SEM                                    |
| Data format      | Raw                                             |
| Parameters of data collection | Respondents are students studying at high schools and junior high schools in three provinces in Vietnam, including: Hanoi, Nam Dinh and Nghe An. |
| Description of data collection | Data was obtained through in-person distribution to students at 12 schools in March 2021. The dataset includes 416 valid responses. |
| Data source location | City/Town: Ha Noi, Nam Dinh, Nghe An. Country: Vietnam |
| Data accessibility | Pham, Huong Thao; Le, Loan; Duong, Quoc Huy; Vu, Trong Nghia; Nguyen, Thanh Nguyen; Nguyen, Thi Ngoc Anh (2021), “Dataset on the effect of extracurricular activities on positive youth development”, Mendeley Data, V1, https://doi.org/10.17632/dkpnfn7254.1 |

Value of the Data

- The data reflects the perception of extracurricular activities and positive development among adolescent at 12 schools in Vietnam.
- The dataset illustrates the correlations between sport activity, volunteer activity, art activity, academic activity and the positive development of adolescent in Vietnam.
- The dataset would be a useful reference source for scholar who are interested in developmental psychology to explore the relationship between extracurricular activities and positive development.
- Exploring the impact of extracurricular activities on the positive development of adolescent could help educational institutions evaluate the beneficial outcomes of extracurricular activities, thereby developing appropriate programs to improve the positive youth development.

1. Data Description

Participation in extracurricular activities can have positive effects on members’ academic results and career success in their life [3], while also significantly improving psychological well-being and physical [5]. Especially in the context of developing countries, new educational methods have appeared besides the traditional ones, one of which is through extracurricular activities. The dataset collected youth’s opinions based on the comprehensive theory of positive adolescent development which is the integration of many theoretical orientations. Particularly, the objective of the dataset is to show the relations between extracurricular activities (sport activities, volunteer activities, art activity, and academic activity) and the positive development of adolescent. This dataset could help authors examine the outcome results of participation extracurricular activities.

The raw dataset includes two parts. The first part is the respondents’ characteristics and the other one is perception of respondent about eight factors: (1) sport activity, (2) volunteer activity, (3) academic activity, (4) art activity, (5) life satisfaction, (6) purpose in life, (7) hopeful future, (8) fulfillment of potential.

Table 1 shows the demographic characteristics of respondents, including: age and location of the respondents. Adolescent participating in survey ranged in age from 13 to 17 years old, more than 35% were 15 years old which makes up the highest proportion of all age groups. In term of location, the majority of respondents are from Nam Dinh province, accounting for 49.3%, while that proportion for Ha Noi and Nghe An are 32.9% and 17.8%, respectively. Fig. 1
Table 1
Descriptive statistics of sample demographics.

| Demographic variables | F    | %   |
|-----------------------|------|-----|
| Age                   |      |     |
| 13                    | 33   | 7.9 |
| 14                    | 56   | 13.5|
| 15                    | 148  | 35.6|
| 16                    | 113  | 27.2|
| 17                    | 66   | 15.9|
| Province              |      |     |
| Ha Noi                | 137  | 32.9|
| Nam Dinh              | 205  | 49.3|
| Nghe An               | 74   | 17.8|

Fig. 1. Confirmatory factor analysis.

2. Experimental Design, Materials and Methods

In this article, the dataset performed for 8 factors: sport activity, volunteer activity, academic activity, art activity, life satisfaction, purpose in life, hopeful future, fulfillment of potential. All items measuring these variables were adapted from previous studies [1,2,4,6,7]. We used seven-point Likert scale to measure all scale, starting from “Totally disagree” to “Totally agree”. To collect data, we created questionnaire based on all items of the scale measuring the constructs and added some demographics questions such as age and location where the respondents live. The scale used in this article was first translated from English into Vietnamese. After that,
Table 2
Descriptive results of participants' responses.

| Constructs and the scale items | Mean | SD   | Skewness | Kurtosis | Factor loadings | CR   | AVE   |
|--------------------------------|------|------|----------|----------|-----------------|------|-------|
| **Sport activity (SP) (Cronbach’s Alpha = 0.887)** |      |      |          |          |                 |      |       |
| SP1 I have put a lot of time into playing my sport | 5.66 | 1.202 | -1.905   | 4.020    | 0.801           |      |       |
| SP2 I would miss the good times of playing if I stop playing | 5.69 | 1.144 | -1.701   | 3.618    | 0.809           |      |       |
| SP3 My involvement in collegiate athletics has helped my health | 5.47 | 1.263 | -1.461   | 1.946    | 0.751           |      |       |
| SP5 My involvement in collegiate athletics has helped my confidence | 5.49 | 1.274 | -1.567   | 2.314    | 0.802           |      |       |
| **Volunteer activity (VL) (Cronbach’s Alpha = 0.932)** |      |      |          |          |                 |      |       |
| VL1 Volunteer activities performed by people from students' social circle (family and friends) | 5.80 | 1.138 | -2.355   | 6.103    | 0.747           |      |       |
| VL2 Students raised in environments with serious social and/or environmental problems | 5.60 | 1.186 | -1.857   | 3.543    | 0.833           |      |       |
| VL3 I participate in volunteer activities to gain advantages for my future career | 5.66 | 1.222 | -2.016   | 4.346    | 0.764           |      |       |
| VL4 Concern for people in more unfavourable conditions prior to entering university and belief that social wellbeing is not only characterized as a behavioural duty | 5.73 | 1.104 | -1.932   | 4.061    | 0.858           |      |       |
| VL5 Students' belief that participation in voluntary actions is beneficial to their personal and professional development, even before entering university | 5.65 | 1.195 | -1.923   | 3.582    | 0.846           |      |       |
| VL6 The student’s own beliefs lead to voluntary work | 5.71 | 1.165 | -2.049   | 4.674    | 0.814           |      |       |
| VL7 Educational institutions, in which the student frequented, prior to university have always encouraged the participation of their students in voluntary activities | 5.64 | 1.174 | -1.963   | 4.095    | 0.843           |      |       |
| **Art activity (AR) (Cronbach’s Alpha = 0.914)** | 0.915 | 0.728 |         |          |                 |      |       |
| AR1 Band or Orchestra | 5.95 | 1.079 | -3.097   | 11.790   | 0.875          |      |       |
| AR2 Dance | 5.89 | 1.078 | -3.148   | 11.564   | 0.872          |      |       |
| AR3 Drama | 5.87 | 1.133 | -2.752   | 9.062    | 0.869          |      |       |
| AR4 Art | 5.89 | 1.106 | -2.853   | 9.947    | 0.909          |      |       |
| **Academic activity (AD) (Cronbach’s Alpha = 0.915)** |      |      |          |          |                 | 0.917 | 0.649 |
| AD1 Activities available at the university suitable for my tendencies | 3.08 | 1.675 | 0.659    | -0.645   | 0.747          |      |       |
| AD2 Activities available at the university serve my needs | 2.96 | 1.559 | 0.789    | -0.184   | 0.836          |      |       |
| AD3 Activities are useful | 3.05 | 1.647 | 0.651    | -0.522   | 0.812          |      |       |
| AD7 I follow advertising activities | 2.99 | 1.563 | 0.773    | -0.195   | 0.828          |      |       |
| AD8 The place of activities is appropriate | 3.10 | 1.661 | 0.675    | -0.597   | 0.842          |      |       |
| AD9 I satisfied on the activities held at the campus | 3.01 | 1.633 | 0.754    | -0.355   | 0.893          |      |       |

(continued on next page)
Table 2 (continued)

| Constructs and the scale items | Mean | SD  | Skewness | Kurtosis | Factor loadings | CR  | AVE  |
|-------------------------------|------|-----|----------|----------|----------------|-----|------|
| Life satisfaction (LS) (Cronbach’s Alpha = 0.872) | | | | | | | |
| LS1 In most ways my life is close to my ideal | 3.87 | 1.715 | 0.049 | -1.357 | 0.754 | | |
| LS2 The conditions of my life are excellent | 4.85 | 1.600 | -0.762 | -0.653 | 0.760 | | |
| LS3 I am satisfied with my life | 3.65 | 1.755 | 0.183 | -1.213 | 0.783 | | |
| LS4 So far I have gotten the important things I want in life | 4.01 | 1.793 | -0.085 | -1.395 | 0.794 | | |
| LS5 If I could live my life over, I would change almost nothing | 4.04 | 1.814 | -0.116 | -1.356 | 0.832 | | |
| Purpose in life (PL) (Cronbach’s Alpha = 0.907) | | | | | | | |
| PL1 I am an active person in carrying out the plans I set for myself | 3.17 | 1.676 | 0.596 | -0.768 | 0.798 | | |
| PL2 I don’t have a good sense of what it is I’m trying to accomplish in life | 2.91 | 1.477 | 0.744 | -0.259 | 0.838 | | |
| PL3 Some people wander aimlessly through life, but I am not one of them | 3.00 | 1.605 | 0.667 | -0.585 | 0.843 | | |
| PL4 I enjoy making plans for the future and working to make them a reality | 2.93 | 1.498 | 0.772 | -0.217 | 0.830 | | |
| PL5 When I think about the future, I feel hopeful | 3.15 | 1.597 | 0.585 | -0.671 | 0.861 | | |
| Hopeful future (HF) (Cronbach’s Alpha = 0.816) | | | | | | | |
| HF1 I am confident that my life in the future will be very good | 5.89 | 1.101 | -2.230 | 6.227 | 0.813 | | |
| HF2 When I think about the future, I am not very hopeful that things will work out | 5.82 | 1.109 | -2.000 | 5.027 | 0.795 | | |
| HF3 It is not likely that my future plans will come true | 5.81 | 1.136 | -1.943 | 4.711 | 0.727 | | |

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) 0.883
Sig. of Bartlett’s Test of Sphericity 0.000
Cumulative % 72.953
Eigenvalues 1.167

Note: N = 416.

we re-translate from Vietnamese into English to compare and edit the Vietnamese version, ensuring the accuracy, clarity without losing the initial meaning of original questionnaire.

We use method in-person to deliver questionnaire directly to respondents and manage to get them back. The data collection occurred in March 2021. A total of 500 questionnaires were delivered directly to students studying at 12 high schools and junior high schools in three provinces in Vietnam. After that, we got back 480 questionnaires. All responses were entered into Excel software before imported into SPSS 22.0. The variables were encoded, and the data were verified to ensure the validity of each questionnaire. After removing responses with high percent of incompletion or conflicting views, the final sample size consisted of 416 respondents.

Quantitative research method was employed to analyze dataset and estimate correlation between variables. The analysis process consisted of three stages [8]. Firstly, we used Cronbach’s Alpha and exploratory factor analysis (EFA) to examine the reliability of each construct. Then, confirm factor analysis (CFA) was performed to check the validity of variables and the fit of model. Finally, we applied structural equation modelling (SEM) to estimate the path coefficients. The data analysis process was supported by SPSS 22.0 and AMOS 22.0 software.

Some descriptive analysis (mean, standardized deviation) has been represented in Table 2. The results illustrated that means of SP (sport activities), VL (volunteer activity), AR (art activity),
HF (hopeful future) were very high, all values of items were higher than 5, while means of AD (academic activity) and PL (purpose in life) were low, values of items were around 3. Also, mean of LS (life satisfaction) was neutral, around 4. Additionally, skewness and kurtosis values were used to demonstrate the univariate normality of scales [9,10]. Results showed that all scales were found in expected values when skewness were lower than 3 and Kurtosis value were less than 8. **Table 3** illustrated a Pearson matrix.

**Fig. 2.** Path model.

|     | VL | AR  | AD  | LS  | PL  | HF  | SP  |
|-----|----|-----|-----|-----|-----|-----|-----|
| VL  | 1  |     |     |     |     |     |     |
| AR  | 0.127** | 1  |     |     |     |     |     |
| AD  | 0.192** | -0.052 | 1  |     |     |     |     |
| LS  | 0.254** | 0.147** | 0.214** | 1  |     |     |     |
| PL  | 0.214** | 0.126 | 0.148** | 0.321** | 1  |     |     |
| HF  | 0.384** | 0.140** | 0.219** | 0.252** | 0.188** | 1  |
| SP  | 0.447** | 0.200** | 0.215** | 0.292** | 0.247** | 0.552** | 1  |

**Correlation is significant at the 0.01 level (2-tailed).**

*Correlation is significant at the 0.05 level (2-tailed).
Table 4
Path coefficients.

| Path                        | Estimate | S.E.  | C.R.  | P-value |
|-----------------------------|----------|-------|-------|---------|
| Sport activity → Life satisfaction | 0.304    | 0.087 | 3.507 | ***     |
| Sport activity → Purpose in life | 0.240    | 0.080 | 2.991 | 0.003   |
| Sport activity → Hopeful future | 0.425    | 0.049 | 8.588 | ***     |
| Volunteer activity → Life satisfaction | 0.187    | 0.089 | 2.098 | 0.036   |
| Volunteer activity → Purpose in life | 0.155    | 0.083 | 1.864 | 0.062   |
| Volunteer activity → Hopeful future | 0.120    | 0.045 | 2.641 | 0.008   |
| Art activity → Life satisfaction | 0.152    | 0.080 | 1.898 | 0.058   |
| Art activity → Purpose in life | 0.125    | 0.075 | 1.669 | 0.095   |
| Art activity → Hopeful future | 0.029    | 0.040 | 0.715 | 0.474   |
| Academic activity → Life satisfaction | 0.163    | 0.053 | 3.063 | 0.002   |
| Academic activity → Purpose in life | 0.096    | 0.049 | 1.932 | 0.053   |
| Academic activity → Hopeful future | 0.053    | 0.027 | 1.959 | 0.050   |

Note: N=416, *** < 0.001.

Fig. 3. Testing common method variable.

p-value < 0.001). Volunteer activity directly leads to life satisfaction (\(\beta=0.187, \ p\text{-value} = 0.036\)) and hopeful future (\(\beta=0.120, \ p\text{-value} = 0.008\)), but does not involved in purpose in life (\(p\text{-value} = 0.062 > 0.05\)). In addition, the results show an insignificant relationship between art activity and positive youth development, all p-value was higher than 0.05. In other words, art activity did not directly promote youths’ life satisfaction, purpose of life, and hopeful future. This result was not consistent with previous studies (e.g. [3,4]). Perhaps, art activities were not adequately attended in the educational programs in Vietnam [11].
Besides, academic activity was noticed to have direct effects on life satisfaction ($\beta=0.163$, $p$-value = 0.002) and hopeful future ($\beta=0.053$, $p$-value = 0.05), but it does not affect purpose in life ($p$-value = 0.053 > 0.05).

Finally, in this study, we adopted the common method variable to secure that there were not common method biases in our study. At the first stage, Harman's one-factor test (unrotated factor solutions) has been used. Result showed that the total variance extracted by single factor for sample reached at 23.626%, this value was much lower than the cut-off of 50%. At second stage, the common latent variable test has been carried out. The factor loadings of two model (Figs. 1 and 3) have been compared and results indicated that the differences between factor loadings of items was lower than 0.2. Common method bias, therefore, was not existed in our study.

**Ethics Statement**

Official permissions have been obtained from Secondary Education Department (SED) as an authorized unit under Ministry of Education and Training (MOET), Vietnam before collecting the dataset from high schools. The authors received informed permission from participants. Participation in the survey was totally voluntary. All of information collected was completely confidential and used for research purposes only.

**Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**CRediT Author Statement**

**Huong Thao Pham:** Conceptualization, Methodology; **Thi Loan Le:** Writing – original draft, Methodology, Investigation, Writing – review & editing; **Quoc Huy Duong:** Data curation, Investigation, Conceptualization; **Trong Nghia Vu:** Methodology, Data curation, Formal analysis; **Thanh Nguyen Nguyen:** Data curation, Visualization; **Thi Ngoc Anh Nguyen:** Data curation, Visualization.

**Acknowledgments**

We would like to express sincere thanks to the students who participated in the survey and their teachers who supported us throughout the data collection process.

**Supplementary Materials**

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.dib.2021.107363.

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