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A SINGLE ITEM MEASURE OF STUDENT STRESSORS AND ITS ASSOCIATIONS WITH WELL – BEING

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ABSTRACT

Background: A crucial part of well-being research has examined the associations between well-being outcomes and exposure to stressors. Questionnaires assessing student stressors exist, and the present study aimed to evaluate a single-item measure of student stressors. **Methods:** Using an online survey, eighty-two secondary school students answered questions on well-being and factors related to well-being (psychological capital, negative coping and social support). They also completed seven-item and single-item measures of exposure to stressors. **Results**: The single-item stressor question was significantly correlated with the longer version and well-being outcomes (positively with negative items such as perceived stress; negatively with positive well-being outcomes). Multivariate analyses, including the other established predictors of well-being, showed that significant associations with stressors were restricted mainly to negative well-being outcomes. **Conclusions:** A single-item measure of student stressors was significantly associated with a longer version and showed all the usual associations with well-being outcomes.

KEYWORDS: Well-being; Stressors; Students; Social support; Negative coping; Psychological capital; Perceived stress; Negative well-being; Positive well-being.

INTRODUCTION

One approach to research on well-being has been to consider it a process. The Well-being Process Questionnaire[1,2] was based on the DRIVE (Demands Resources Individual Effects) stress model.[3,4] The Well-being Process model was first used with occupational sample[5-29] and then with students.[30-42] The DRIVE model initially focused on predictors of mental health, such as demands, support and control, and coping styles. The Well-being Process Questionnaire (WPQ) included more predictor variables (e.g. psychological capital) and positive outcomes (happiness, life satisfaction and positive affect). Recent studies have generally replicated the effects of the established predictors and added new predictor (e.g., workload, work-life balance, flow, and daytime sleepiness) and outcome variables (e.g., flourishing and physical health).

The well-being of university students has also been studied for many years[43], and high levels of depression, anxiety, and stress have been reported in undergraduate students.[44,45] Many of the same concepts used in the WPQ, such as demands, resources, coping style, and personality, have also been applied in this research. Other studies have extended the research to secondary school students.[46, 47] Student-related circumstances are frequently referred to in student well-being research, including fear of failing and long hours of study[43], social demands[44,45,48] and lack of social support.[49] Questionnaires have been developed explicitly for assessing student-specific circumstances that can impact well-being, such as the Inventory of College Students' Recent Life Experiences (ICSRLE), which includes factors such as time pressures, challenges to development, and social mistreatment.[50] Research using the ISCRLE has also shown that the variables involved should be acknowledged in managing stress by businesses whose employees may also be students,[51] further supporting the necessity of establishing the generalisability of the approach to other areas.

One of the most essential approaches in developing the WPQ was using short scales or single items to assess the various concepts. This allowed the inclusion of many predictors and outcomes. The shortened form of the ICSRLE used seven questions. The main aim of the present study was to use a single student stressors question and examine its associations with well-being outcomes.

Ethical committee approval
The Ethical Committee of the School of Psychology, Cardiff University, approved the current study, and all participants consented to volunteer. After the survey was completed, all were debriefed and provided with the details of the researcher and ethics committee should they want to contact us regarding this study. Volunteers were recruited from a secondary school in South Wales.

Participants
Eighty-two secondary school students (48.2% male; 50% aged 12-13 years, 50% aged 13-14 years) completed the survey.

MATERIALS

Participants completed an online survey containing questions about well-being and student lifestyle factors.
The circumstances items were developed to relate to students' demands and resources and consisted of single-item measures of the 7 ICSRLE factors. These single-item measures are shown below.

ICSRLE short (demands)
(Please consider the following elements of student life and indicate to what extent they have been a part of your life over the past 6 months :).

Challenges to your development (e.g. essential decisions about your education and future career, dissatisfaction with your written or mathematical ability, struggling to meet your or others' academic standards).

Time pressures (e.g., too many things to do simultaneously, schoolwork interruptions, and many responsibilities).

Academic Dissatisfaction (e.g. disliking your studies, finding courses uninteresting, dissatisfaction with school).

Romantic Problems (e.g. decisions about intimate relationships, conflicts with boyfriends'/girlfriends' family, disputes with boyfriend/girlfriend).

Societal Annoyances (e.g. getting ripped off or cheated in purchasing services, social conflicts, disliking fellow students).

Social Mistreatment (e.g. social rejection, loneliness, being taken advantage of).

Friendship problems (e.g. conflicts with friends, being let down or disappointed by friends, having your trust betrayed).

The single-item student stressors question was:
"I have had stressful experiences (e.g. time pressure, academic dissatisfaction, loneliness, and friendship problems)."

Rated on a scale from 1=Strongly disagree to 10=Strongly agree.

Well-being questions.
The Short-form Well-Being Process Questionnaire (SFWPQ)[47] was used. It comprised questions about well-being predictors and measures of well-being outcomes.

Analysis strategy
Initial correlational analyses examined associations between the total student stressors score and the single-item measuring stressors. Correlations between these measures and the well-being outcomes were then computed. Finally, a MANOVA, including the other established predictors of well-being, was carried out to determine which outcome variables were significantly associated with the single-item student stressor variable.

RESULTS

Table 1 shows the correlations between the total stressor score, the single-item stressor score, and the well-being outcomes. The two stressor scores were significantly correlated and associated with the well-being outcomes in the predicted directions (i.e., positively related to negative outcomes and negatively associated with positive outcomes, all p's < 0.001).

Table 1: Correlations (Pearson r) between the student stressor scores and well-being outcomes

	Single-item stressor question	Total stressor score
Total stressor score	0.48	
Positive well-being	-0.35	-0.36
Negative well-being	0.57	0.44
Perceived stress	0.64	0.55
Life satisfaction	-0.39	-0.32
Anxiety	0.49	0.51
Depression	0.46	0.50

A MANOVA was then carried out, including all the well-being outcomes, the single-item student stressor variable, and the established predictors of well-being. This analysis aimed to identify which associations with the student stressor score remained significant when the established predictors were covaried.

The significant overall predictors were stressors (Wilks Lambda = 0.80 p <0.05), positive coping (Wilks Lambda = 0.78 p <0.05), negative coping (Wilks Lambda = 0.76 p <0.05), psychological capital (Wilks Lambda = 0.77 p <0.05), and work-life balance (Wilks Lambda = 0.76 p <0.05). Student stressors were significantly associated

with negative well-being ($p < 0.01$) and perceived stress ($p < 0.005$) but not the other outcomes.

DISCUSSION

The well-being process model includes many predictors of both positive and negative well-being outcomes. These concepts need to be measured using short items to avoid questionnaire fatigue. The present study reduced the measurement of student stressors to a single question. This question significantly correlated with the longer original stressor scale and the well-being outcomes. As in previous research, multivariate analysis showed that student stressors were only significant predictors of negative outcomes when other established predictors were included. Overall, these results confirm that student stressors can be measured using a single question, which allows for the inclusion of other concepts in the well-being process questionnaire. Further research is required to determine whether these results are obtained from different age groups (e.g., university students).

CONCLUSION

An essential part of well-being research involves the examination of the associations between well-being outcomes and exposure to stressors. Questionnaires assessing student stressors exist, and the present study aimed to evaluate a single-item measure of exposure to student stressors. Eighty-two secondary school students completed an online survey involving questions on well-being outcomes and predictors of well-being (negative coping, psychological capital and social support). They also completed seven-item and single-item measures of exposure to student stressors. The single-item stressor question was significantly correlated with the longer version and the well-being outcomes (negatively with positive well-being outcomes; positively with negative items such as perceived stress). Multivariate analyses, including the other established predictors of well-being, showed that significant associations with stressors were restricted mainly to negative well-being outcomes. In conclusion, a single-item measure of student stressors was significantly associated with a longer version and showed all the usual associations with well-being outcomes.

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