

**THE MICROSTRUCTURE OF A SHORT MEASURE OF STUDENT SOCIAL SUPPORT
AND ITS ASSOCIATIONS WITH WELL-BEING AND ACADEMIC OUTCOMES**

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ABSTRACT

Background: Social support is a major component of well-being. The present study examined the microstructure of a four-item student social support scale. **Methods:** An online survey of questions on well-being and factors related to well-being (psychological capital, negative coping and stressors) was used. The survey also included four items measuring perceived social support components (esteem, tangible, belonging, and emotional support). One thousand two hundred and ninety-three university students completed the online survey. Academic attainment marks were available for the students, and their perceived work efficiency and course stress were recorded. **Results:** Factor analysis showed that the social support items loaded on a single factor. Correlations showed that all the social items were significantly associated with the well-being outcomes, academic attainment and perceived work efficiency. Multivariate analyses, including the other established predictors of well-being, showed that significant associations with social support were restricted to the well-being outcomes. **Conclusions:** The four-item social support scale from the Well-being Process Questionnaire consists of a single factor. When other established predictors of well-being and attainment were covaried, social support was significantly positively associated with positive well-being and negatively associated with negative well-being.

KEYWORDS: Well-being; Social support; Student Stressors; Negative coping; Psychological capital; Perceived stress; Negative well-being; Positive well-being; Academic attainment; Perceived efficiency; Course stress.

INTRODUCTION

Social support is an essential component of approaches to well-being. One approach to well-being has been to consider it a process, and 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 initially used with occupational samples^[5-22] and then with university students.^[23-45] The DRIVE model included social support and initially examined whether demands, support, control, and coping styles predicted mental health. The Well-being Process Questionnaire (WPQ) included happiness, life satisfaction and, positive affect as outcomes and psychological capital as a predictor. Recent research has replicated the effects of these established predictors and added new outcome variables, such as flourishing and physical health, and additional predictors, such as workload, flow, daytime sleepiness, and work-life balance.

The measures of social support used in the Student WPQ were based on the Interpersonal Self-Evaluation List (ISEL).^[46] Four questions measured belonging support, esteem support, tangible support and emotional support.

The present study's first aim was to examine whether these questions were independent or loaded on a single factor. A second aim was to investigate associations between the social support questions and well-being and attainment items. Finally, the analyses examined which associations between social support and the outcomes remained significant when established predictors (psychological capital, stressors, negative coping, and conscientiousness) were covaried.

Ethical committee approval

The study was approved by the Ethics Committee, School of Psychology, Cardiff University, and carried out with the participants' informed consent. After the survey was completed, the participants were debriefed.

Participants

One thousand two hundred and ninety-three undergraduate psychology students (mean age = 19.5 years, age range 17-48 years; 138 male; 1145 female; 49.7% year 1, 50.3% year 2) participated in the study.

Materials

The online survey contained questions about well-being and academic attainment. The social support questions are shown below.

Social support questions

The Student WPQ social support measures covered perceived esteem support, tangible support, belonging support and problem-solving support. These questions are shown below.

Esteem support

I feel that I have the social support I need to enhance my self-esteem (For example, There is someone who will listen to me when I need to talk, there is someone who will give me good advice, there is someone who shows me love and affection)

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

Tangible support

There is a person or people in my life who would provide tangible support for me when I need it (for example, money for tuition or books, use of their car, furniture for a new apartment).

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

Belonging support

There is a person or people in my life who would provide me with a sense of belonging (for example, I could find someone to go to a movie with me, I often get invited to do things with other people, I regularly hang out with friends).

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

Emotional support

There is a person or people in my life with whom I would feel perfectly comfortable discussing any

problems I might have (for example, difficulties with my social life, getting along with my parents, sexual issues). Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

Well-being questions

The Student Well-Being Process Questionnaire (WPQ)^[25] was used. It comprised questions about well-being predictors and measures of well-being outcomes.

Academic Performance

The grade point average (GPA) mark (average of coursework and examinations) was available, and perceived work efficiency and course stress were measured.

Analysis strategy

A factor analysis was carried out to determine whether the social support measures loaded on a single factor.

Correlational analyses examined the associations between the social support scores and the well-being and attainment outcomes. Finally, a MANOVA was conducted to determine which outcome variables were significantly associated with social support. This analysis included the other established predictors of well-being as covariates.

RESULTS

Factor analysis revealed a single-factor solution accounting for 63.5% of the variance. The scale had a Cronbach alpha value of 0.81.

Table 1 shows the correlations between the social support scores and the well-being and attainment outcomes. All the items were significantly associated with most outcomes (p <0.01); the exceptions were the correlations between the social support measures and course stress, GPA and belonging and emotional support.

Table 1: Correlations (Pearson r) between the social support scores and well-being and attainment outcomes.

	Positive well-being	Negative well-being	Work efficiency	Course stress	GPA
Esteem support	0.46	-0.35	0.12	-0.06	0.11
Tangible support	0.25	-0.15	0.18	-0.04	0.10
Belonging support	0.40	-0.30	0.11	-0.04	0.02
Emotional support	0.38	-0.28	0.17	0.02	0.02

A MANOVA was then carried out, including the total social support variable and the established predictors of well-being, with the well-being and attainment variables as dependent variables. This analysis showed which associations with the social support variable remained significant when the other established predictors were covaried. All the established predictors (conscientiousness, psychological capital, social support, and negative coping) showed significant associations with the outcomes. Social support was significantly associated with positive and negative well-being but not the attainment variables. Psychological capital, stressors and conscientiousness predicted the attainment scores.

DISCUSSION

The Well-being process approach was developed from the DRIVE stress model, and a key variable in the original model was support from managers and colleagues. As the approach was applied to students, social support was based on the ISEL, and questions representing the sub-scales were developed. The present analysis showed that these questions loaded on a single factor and showed similar associations with the outcomes. This means that summing the items to give a total social support score is appropriate. This total score was included in an analysis with other established predictors. The results showed that social support was a

significant predictor of positive and negative well-being, not attainment scores. These results suggest that social support could be represented by a single question that provides appropriate information about the various types of support.^[47]

CONCLUSION

The present study examined the microstructure of a four-item scale measuring students perceived social support (esteem, tangible, belonging and emotional support). One thousand two hundred and ninety-three university psychology students completed an online survey with questions on well-being outcomes and predictors of well-being (stressors, psychological capital, negative coping and conscientiousness). They also completed the four-item social support questions. Factor analysis revealed that the social support items were loaded on one factor. Correlations showed that all the social support items were significantly associated with well-being outcomes and perceived efficiency. Multivariate analyses, including the established predictors of well-being, revealed that significant associations with social support were restricted mainly to positive and negative well-being. The four-item student social support scale from the Well-being Process Questionnaire consists of a single factor. The individual items were significantly correlated with well-being outcomes and perceived efficiency. Future research could use an even shorter version of this scale.^[47]

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