Investigating to what extent Empowerment relates to Psychopathological Symptoms in Young Adults

Bachelor thesis- Health Psychology & Technology

Department of Psychology, University of Twente

1st supervisor: Dr. Jorge Piano Simoes

2nd supervisor: Dr. Stans Drossaert

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Abstract

Background: Empowered people make better decisions, depend less on medical services, and use available resources for their mental health better. Passive involvement in care, however, may reflect the emotional state and general well-being in the case of young adults. Therefore, this study's aim is to find out how psychopathological symptoms might be related to the level of empowerment in young adults. Furthermore, the aim is to find out if higher levels of well-being are associated with higher levels of empowerment.

Methods: Convenience sampling was used to recruit the participants. The study consisted of two questionnaires measuring mental health symptoms via the IDAS-II and empowerment with the implementation of the PAM-MH. Linear regression models determined the relationship between psychopathological symptoms and empowerment and the relationship between well-being and empowerment.

Results: It was found that general depression and dysphoria were significantly associated with lower empowerment scores. However, panic and social anxiety were not significantly associated with lower empowerment. Well-being was found to be statistically significant and positively associated with empowerment.

Conclusion: The results revealed new insights into the relationship between psychopathological symptoms and empowerment. It was found that especially depressive people had trouble taking care of their mental health. Furthermore, well-being was found to show a positive relationship. Therefore, raising the well-being of students may be an effective method for raising the level of empowerment, and ultimately raising the standard of care.

Introduction

Approximately half of all diseases affecting young adults in the United States are mental problems (Pedrelli et al., 2015). Previous research has found that especially students in higher education are experiencing an increasing number of mental health issues. Especially, among students between the ages of 18 and 22 who participated in a cross-national survey in 2016, the prevalence of mental disorders was estimated to be roughly one-fifth (20%) (Duffy et al., 2019). For instance, for undergraduate students and graduate students, the estimated prevalence of any depressive condition was 15.6% and anxiety condition 13.0%. Furthermore, 2% of students reported having suicidal thoughts, in a study done by Eisenberg et al. (2010). Therefore, a previous study found that internalising symptoms, such as fear, anxiety, and depression, are the most prevalent and detrimental challenges for young adults (Cervin et al., 2023). Magnezie and colleagues (2014) conducted another study that revealed that depressive symptoms are often associated with feelings of hopelessness and decreased quality of life in a person, with these factors being related to empowerment. It was discovered that a lower score indicates a vicious cycle of depression symptoms and a lower level of empowerment.

Causes of Increased Psychopathological Symptoms among Students

The emotional state that students go through during their college years is a contributing factor to the increased occurrence of psychopathological symptoms among students. Students who experience stress may develop more psychopathology. Some students struggle with the difficult duties of separating from their families and dealing with academic pressure in addition to this, while others may have a great deal of work and financial responsibilities (Pedrelli et al., 2015)**.** Another reason is that young adults may be more vulnerable to the COVID-19 pandemic's effects on mental health. For instance, students were prevented from interacting with other students and forced to stay inside. After that, almost all education in the US took place online. Therefore, a recent analysis of the connection between adolescents' mental health, their level of loneliness, and social isolation found that social distancing tactics have been particularly harmful to young people (Hawes et al., 2022). However, it is important to consider that less than 20% of students who tested positive for mental disorders or who met the diagnostic criteria were aware of their mental health condition (Duffy et al., 2019). Despite the high risk and non-awareness of mental health problems, it was found that many students have actively used the Internet to look for health information, indicating that they are interested in being involved in their healthcare decisions (Hooper & Huffman, 2014). Therefore, a better understanding of how empowerment and

psychopathology interact in the cohort of students may lead to better awareness and better ways to cope with it.

Definition of Empowerment

Empowerment in relation to healthcare places a strong emphasis on people's ability to take control of areas of their lives that are related to their health and to make decisions about their health (behaviour) (McAllister et al., 2012). Therefore, empowerment generally refers to people feeling like they are in charge of their lives (Diener & Biswas-Diener, 2005). It encompasses the capacity to comprehend and exert control over their own personal, social, and health circumstances to take action to better their own lives (Fitzsimons & Fuller, 2002). It is assumed that individuals who are empowered will make more logical health choices to maximise their health and well-being, become less reliant on healthcare services, and eventually contribute to more effective use of healthcare resources (McAllister et al., 2012). It also includes making progress toward their well-being. Positive self-esteem as part of well-being and a sense of empowerment are major factors in determining the quality of life (Fitzsimons & Fuller, 2002). It has been proposed that the "sense of control" is particularly crucial because it directly affects a person's mental health (Woodall, et al. 2010). For example, poor health outcomes can result from powerlessness, which shows itself as a lack of influence or control. On the other hand, empowerment can result in advantages like improved emotional health, independence, and coping mechanisms (Porter & Beyerholm, 2018). However, to feel empowered, it's crucial to have some level of self-efficacy or confidence. These qualities are founded on an understanding of one's capacity for problem-solving, and communication, as well as confidence in social relationships and in the sociocultural setting. Moreover, people who want to feel empowered must be able to empathise, be tolerant, and be flexible. It also requires bravery and taking risks (Finfgeld, 2004). Not all people have the necessary capacities to feel empowered. The emotional state of individuals can influence their level of self-efficacy or confidence which can have an impact on their participation in mental healthcare (Magnezie et al., 2014).

The Relationship between Psychopathology and Empowerment

Recently, it has been recognized that the active involvement of people with mental disorders should be seen as a priority in healthcare (Rimondini et al., 2019). It has long been an issue how few students really seek out psychological help when they need it. When students feel empowered, they are more likely to recognise when they need help and actively seek it out. However, in adult populations, when people must deal with a major depressive disorder and depressive symptoms it is difficult to seek out treatment (Hooper & Huffman,

2014). For example, only one-third of people with diagnosed depression feel empowered since some mental health problems, such as severe depression or dysphoria, can make patients less likely to look out for their health (Rimondini et al., 2019). This shows that people's ability to successfully manage their healthcare may be hindered by mental health issues. The reason for this is that mental health problems impede the level of empowerment since the capacity to efficiently manage their healthcare is correlated with their emotional state (Magnezie et al., 2014). Furthermore, young adults with mental health issues frequently struggle to socially adjust in situations, have trouble creating strong interpersonal bonds, and have difficulties maintaining supportive social networks which can influence empowerment (Grealish et al., 2016). According to Duarte- Diaz and colleagues (2022) low symptoms of anxiety have been linked to higher levels of empowerment levels in a cross-sectional study. They found that a greater reduction in anxiety and, consequently, panic symptoms, was significantly associated with higher levels of empowerment. This shows that empowerment is essential, especially for people dealing with ongoing mental health issues (Rimondini et al., 2019).

The Relationship between Well-being and Empowerment

Well-being is defined by positive affectivity and high energy among individuals. Furthermore, it is related to positive affective experiences that are linked to (low) distress levels in an individual (Jimenez et al., 2022). However, literature is sparse on the association between well-being and empowerment; although, it was found that lower levels of functioning and well-being may influence how closely people feel compelled to seek out and follow treatment recommendations made by professionals. They might also feel less invested in their care or even less powerful (Hooper & Huffman, 2014). Furthermore, people with lower levels of self-efficacy perceived challenges as frightening and frequently gave up when presented with difficulties. It was found that higher levels of self-efficacy boosted personal well-being. This shows that improved trust in one's own skills to exert better control over challenging conditions is connected to self-efficacy and well-being in young individuals with mental health difficulties (Grealish et al., 2016). This means that a person's sense of empowerment may be strengthened if they feel more confident to handle challenges because of having a stronger sense of well-being. Higher levels of well-being are expected to increase a person's likelihood of experiencing happiness and general positivity in their lives. Their sense of control over their mental health and well-being may be significantly impacted by this positive emotional state. As a result, individuals might experience a greater sense of empowerment to actively manage their mental health and make choices that advance their well-being (Diener & Biswas-Diener, 2005). It has been suggested that empowerment, on the other hand, might

improve the well-being of those who have ongoing mental health issues suggesting a bi-directional relationship. Among those with persistent mental health issues, well-being entails more than just managing symptoms. Instead, it entails rejecting a "living by proxy" way of life. It is proposed that this reformulation of the self is made possible by empowerment (Finfgeld, 2004). Nowadays, there is strong evidence that obtaining good mental health and well-being depends on empowerment (Grealish et al., 2016). Therefore, it is interesting to find out the association between well-being and empowerment among students.

The current study

Previous research has identified the high prevalence of mental health problems among students (Duffy et al., 2019). Furthermore, research suggests that people's mental health and well-being have a noticeable impact on empowerment (Grealish et al., 2016). However, there is a lack of studies investigating how empowerment is associated with psychopathological symptoms and well-being in the cohort of university students. This study aims to fill this research gap and provide a better understanding of these associations in the context of higher education. The findings may contribute to the development of interventions and support programmes to improve empowerment among students. To research this, this study will look at the most common psychopathological symptoms among students which were found to be anxiety, depression, depressive symptoms, and suicidal ideation (Duffy et al., 2019). Furthermore, well-being is investigated since psychological distress can have a powerful impact on the student's overall well-being (Baik et al., 2019). It is expected that psychopathological symptoms (including general depression, dysphoria, panic, and social anxiety) are negatively associated with empowerment. On the other hand, well-being is expected to be positively associated with empowerment. Since there is little known about these relationships among students, this paper will deal with the research question: ,,To what extent does empowerment relate to the level of psychopathological symptoms in young adults?''. Based on this research question following hypotheses will be tested in this paper:

H1: Symptoms of general depression are negatively associated with empowerment.

H2: Symptoms of dysphoria are negatively associated with empowerment.

H3: Symptoms of panic are negatively associated with empowerment.

H4: Symptoms of social anxiety are negatively associated with empowerment.

H5: Well-being is positively associated with empowerment.

Methods

The study was approved by the University of Twente's (UT) Behavioural, Management, and Social Sciences Ethics Committee on April 11th, 2023 (request number: 230406). The study was put online on the platform Qualtrics as well as on the website SONA. SONA is an online platform for students at UT on which they can participate in surveys and receive credits to finalize their studies. The study was online from April 11th till the 13th of May 2023.

Design

The study is a cross-sectional study consisting of a questionnaire determining students' levels of psychopathological symptoms and well-being via the Inventory of Depression and Anxiety Symptoms (IDAS-II). Furthermore, it consists of a questionnaire measuring the level of empowerment as determined by the Patient Activation Measure Mental Health (PAM-MH).

Participants

Convenience sampling was used to compile the sample for this study. The responders were chosen based on their availability and interest in taking part in the research. The rapid and affordable sample technique chosen is called convenience sampling and comprises people who are accessible to the researcher and eager to participate (Nikolopoulou, 2022). Therefore, the researcher used the test subject pool SONA from the UT as well as personal relationships to find participants for the survey.

The inclusion criteria of this study were that respondents were able to understand and read the English language as well as older than 18 years old. Since the study has its focus on young adults, especially university students, respondents needed to be aged between 18 and 29. Furthermore, this research made use of a non-clinical sample. Lastly, a necessity for participating in the study was a stable internet connection as well as access to a mobile phone, computer, or tablet. In total 90 students completed the questionnaires.

Demographics

In Table 1 the background characteristics of the participants are displayed. Data from 76 participants (M_{Age}= 21.92, SD = 2.83, range = 18 to 29) were included in the final analysis, after excluding 13 incomplete datasets and one participant who did not consent to participate in the study.

Table 1

Sample descriptives

Variable	Count	Mean (SD)
Age		21.92 *(2.83)*
18-21	39 (51.32%)	
22-25	27 (35.53%)	
26-29	10 (13.16%)	
Gender		
Female	50 (65.79%)	
Male	23 (30.26%)	
Non-binary/third gender	3 (3.95%)	
Nationality		
Dutch	23 (30.26%)	
German	44 (57.89%)	
Other	9 (11.84%)	
Education		
High school graduate	21 (27.63%)	
Bachelor student	46 (60.53%)	
Master student	6 (7.89%)	
Other	3 (3.95%)	

Materials and Procedure

The materials in the study consisted of two questionnaires combined in one survey. The program Qualtrics (https://www.qualtrics.com), which can be used to produce surveys and create reports, was used to create the digital survey. Before the start of the survey, the participants were asked to provide their consent to participate in the study and to have their data anonymously stored and analysed. They were provided with information about the study's confidentiality as well as asked to indicate some demographic data. Participants were asked to indicate their age, gender, nationality, and educational background. To make sure that as less as possible data needed to be excluded, a certain function was incorporated into the survey. Participants needed to answer all questions before they could finish the study. The first questionnaire measured the depression and anxiety symptoms via the IDAS-II of the students. After having finished this questionnaire participants moved on to the second

questionnaire which measured the level of empowerment via the PAM-MH. After the participants completed the questionnaires, which took approximately 20 minutes, the survey was analysed with the program Rstudio. This allowed us to produce an overview of the results and link the data from the two questionnaires.

Measures

The IDAS-II

The IDAS-II was created to incorporate multiple scales that evaluate various symptoms of internalising disorders. It is different from other self-report measures for depression since it also incorporates anxiety symptoms which are closely correlated with depression indicators (Watson et al., 2012). The original IDAS-II consists of 99 items, however, since this study has its focus on young adults' susceptibility to depression and anxiety this questionnaire consists of only 39 items and five analytically derived symptom scales, which include general depression, dysphoria, panic, social anxiety, and well-being. The General Depression Scale assesses a wide range of symptoms frequently linked to depression (Nelson et al., 2018). The Dysphoria scale measures a wide component that captures the essential emotional and cognitive symptoms that underlie depression and anxiety. The panic scale measures anxiety symptoms and is a significant predictor of panic disorder whereas the social anxiety scale measures social phobia (Stasik-O'brien et al., 2019). In addition to the four IDAS-II scales related to psychopathological symptoms mentioned above, the scale "well-being" was also included in this study. The scale of general well-being measures high energy levels and positive affectivity (Jimenez et al., 2022). The IDAS-II evaluates current symptoms (those that have occurred within the last two weeks). As a result, it does not measure the more stable, long-term forms of psychopathology (Watson et al., 2012). For example, a statement in the questionnaire asked about the level of interest in usual hobbies and activities. The respondent could answer according to the five-point Likert scale (from 1 = "not at all" to 5 = "extremely") and indicate how they have felt or experienced this item for the past two weeks, including the day they filled in the questionnaire.

The Cronbach alpha was computed to assess the reliability of the subscales of the IDAS-II. The general depression subscale consisted of 20 items (α = .86), the dysphoria subscale consisted of 10 items (α = .89), the panic subscale consisted of 8 items (α = .83), and the social anxiety subscale consisted of 6 items (α = .88). Lastly, the subscale general wellbeing consisted of 8 items (α = .86). The IDAS-II subscales demonstrate good to excellent reliability, with Cronbach's alpha values close to 1.

The PAM- MH

The self-report PAM-MH evaluates patient activation in relation to mental health. It is designed as a mental health version to answer the demand for a comparable, clinically applicable patient activation measure for people currently dealing with psychopathological symptoms. Furthermore, it is a test that measures the knowledge of mental health conditions, medical treatment, and self-care efficacy (Green et al., 2010). The PAM-MH was also found to have a strong positive association with measures of health behaviour, health information seeking, and readiness to change in a study of a workplace population (Harvey et al., 2012). Higher PAM scores indicate that people are more likely to engage in self-management activities, utilise self-management resources, and report higher treatment adherence (Marshall et al., 2012). In this questionnaire, for example, participants were provided with a statement asking how important taking an active role in their mental health care is to them in determining their mental health and their ability to function. The respondents had to answer the items with either *strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree* (Marshall et al., 2012).

The questionnaire consisted of 13 items and the value for Cronbach's Alpha for the survey was $\alpha = .84$ showing good reliability.

Data analysis

Pre-processing. The data was imported from Qualtrics to the statistics program Rstudio (R 4.3.0), where the dataset was checked and cleaned before conducting the statistical analysis. Data cleaning involved excluding incomplete datasets as well as excluding participants who did not give consent. Descriptive statistics computed the demographics of the participants. Mean and standard deviation were calculated for age, while percentages were calculated for gender, nationality, and educational background.

Statistical analyses. Linear regression models were used to analyse the dataset and answer the research question with its hypotheses. The models determined the relationship between psychopathology and empowerment, specifically the relationship between one of the subscales of the IDAS-II and empowerment. Furthermore, the model determined the relationship between well-being (as part of the IDAS-II subscale) and empowerment. 95% Confidence Intervals (CIs) and p-values were computed using a Wald t-distribution approximation. A p-value of .05 was utilised as the significance level for the analyses to indicate whether a result would be statistically significant. The effect size was calculated with Cohen's d.

Results

The IDAS-II

   The means and standard deviations for each of the IDAS-II scales are presented in Table 2. The overall score for each subscale was obtained by summing the values of the individual items within the subscale. The resulting overall scores represented participants' responses to the subscales. The mean provided an estimate of the average overall score within each subscale, while the standard deviation indicated the spread of scores around the mean. In this case, higher mean scores indicate higher levels of the specific symptom, while lower mean scores indicate lower levels. Higher scores, therefore, indicate more severe symptoms, except for well-being (De la Rosa-Caceres et al., 2022). The participants scored highest in general depression with a mean score of 46.33, indicating moderate to severe depressive symptoms. Dysphoria had a mean score of 22.88, indicating moderate feelings of dissatisfaction. However, panic (mean score of 13.14) and social anxiety (mean score of 12.66) were less severe. On the other hand, the participants scored higher in well-being (mean score of 21.09), suggesting greater overall well-being and life satisfaction.

The PAM-MH

   For each participant, the weighted scores for all 13 items were summed up resulting in an overall empowerment score for each participant. After that, the empowerment scores were normalised to a scale ranging from 0 to 100. Then, the mean and standard deviation were calculated which are presented in Table 2. The score of 53.97 is relatively moderate, suggesting that, on average, the participants have moderate levels of empowerment.

Table 2

Mean score and standard deviations (SD) for the IDAS-II and PAM-MH

Questionnaire	Construct	Mean (SD)
IDAS-II	General depression	46.33 *(10.96)*
	Dysphoria	22.88 *(7.87)*
	Panic	13.14 *(5.44)*
	Social anxiety	12.66 *(5.83)*
	Well-being	21.09 *(3.02)*
PAM-MH		53.97 *(26.63)*

The Association between Psychopathology and Empowerment

In order to test the first four hypotheses, namely, the association between symptoms of general depression, dysphoria, panic, and social anxiety with empowerment, four univariable linear regression models were fitted. Furthermore, confidence intervals were computed. The results are presented in Table 4.

It was found that general depression $t(74) = -3.02$, $p = .003$, $d = -.71$, 95% CI [-1.19, -0.24] and dysphoria $t(74) = -3.95$, $p = .0002$, $d = -1.25$, 95% CI [-1.89, -0.62] were significantly associated with lower empowerment. The effect size of general depression of -.71 and the effect size of dysphoria of -1.25 show large associations which means as general depression and dysphoria increase, empowerment scores tend to decrease. This is also indicated by the p-value of .003 for general depression and the p-value of .0002 for dysphoria. Therefore, the findings show that the first and second hypotheses are accepted. It was found that students who scored higher on general depression and dysphoria scored lower on empowerment.

However, it was found that panic $t(74) = -31.66$, $p = .1$, $d = -.82$, 95% CI [-1.81, -0.16] and social anxiety $t(74) = 1.53$, $p = .13$, $d = -.71$, 95% CI [-1.64, 0.21] were not significantly associated with lower empowerment. The effect size of -.82 for panic and of -.71 for social anxiety indicate moderate associations, meaning that there may be some difference in empowerment scores between students with higher and lower levels of panic and social anxiety, but it is not substantial enough to reach significance in this study. This means as panic and social anxiety increase, empowerment does not tend to decrease. Furthermore, this negative association is not statistically significant as indicated by the p-value of .1 for panic and the p-value of .13 for social anxiety. As a result, it can be concluded that the third and fourth hypotheses can be rejected. Students who score high on panic or social anxiety do not score specifically lower on empowerment.

The Association between Well-being and Empowerment

In order to test the fifth hypothesis, namely, the association of well-being with empowerment, also a univariable linear regression model was fitted. Additionally, the confidence interval was computed. The results are also presented in Table 4.

It was found that well-being is statistically significant and positively associated with empowerment, $t(74) = 3.48$, $p = .0008$, $d = 2.94$, 95% CI [1.26, 4.62]. The effect size of 2.94 represents a large association, which indicates a strong relationship between well-being and empowerment. The effect size suggests that students with higher levels of well-being have

significantly higher feelings of empowerment compared to those with lower well-being. This means as well-being increases, empowerment tends to increase as well. This is also indicated by the p-value of .0008. Therefore, the fifth hypothesis is accepted. The findings indicate that high levels of well-being are associated with higher levels of empowerment.

Table 4

The Association between Psychopathology and Well-being according to the subfactors of the IDAS-II (Independent Variables) with Empowerment (Dependent Variable)

	Beta	SE	T	p-value	[1]CI	
					2,5%	97,5%
Intercept	87.07	11.26	7.74	<0.001	64.64	109.5
General Depression (H1)	-0.71	0.24	-3.02	0.003	-1.19	-0.24
Intercept	82.68	7.67	10.77	< 0.001	67.39	97.97
dysphoria (H2)	-1.25	0.32	-3.95	0.0002	-1.89	-0.62
Intercept	64.82	7.04	9.20	<0.001	50.78	78.85
panic (H3)	-0.82	0.49	-1.66	0.1	-1.81	0.16
Intercept	62.99	6.46	9.75	<0.001	50.12	75.86
social anxiety (H4)	-0.71	0.46	-1.53	0.13	-1.64	0.21
Intercept	-8.06	17.96	-0.45	0.66	-43.89	27.78
well-being (H5)	2.94	0.84	3.48	0.0008	1.26	4.62

[1] *CI = Confidence Interval*

Discussion

This thesis investigated the association between empowerment and psychopathological symptoms in young adults by focusing specifically on university students. Furthermore, it investigated the relationship between well-being and empowerment.

The results in this research suggest that two symptoms, namely general depression, and dysphoria, were statistically significantly associated with empowerment. The observed negative associations supported what had already been found in past studies (Porter & Bejerholm, 2018). These results show an association between higher levels of general depression and dysphoria and lower levels of patient empowerment. This supports the research done by Magnezie and colleagues (2014) who discovered that people's capacity to take care of their health is correlated with their emotional state. They specifically found that this was the case for people dealing with depressive symptoms. It was found that especially depressive people had trouble taking care of their mental health. This highlights the crucial part that depression plays in empowerment. Depressive symptoms were associated with lower levels of empowerment, and this means that depression may reduce the likelihood of activation gains and self-management behaviour improvements. Activation seems unlikely to happen if depression symptoms continue (Hibbard et al., 2006).

Regarding the other two symptoms measured with IDAS-II, namely social anxiety, and panic, the results suggest no statistically significant association between either of these scales and empowerment. This was not in line with the expectations. A study done by Duarte-Diaz and colleagues (2022) found evidence that fewer symptoms of anxiety have been associated with higher empowerment levels. They discovered that a higher rise in empowerment was substantially associated with greater anxiety reduction and therefore panic symptoms. However, regarding the design of the study, it was visible that the respondents frequently chose the option of "not at all" in the IDAS-II questionnaire. Additionally, the response option "extremely" was chosen less than the middle-range options when answering the statements. This could be because the study was able to detect that students have a lower psychopathological load and therefore are less likely to display any symptoms of depression and/or anxiety. This could explain why some of the findings eg. panic and social anxiety were non-significant.

As expected, the current study found that well-being is positively associated with empowerment. Students who display higher levels of well-being are more empowered and therefore may be able to make more logical health choices to maximise their mental health and well-being. Furthermore, as a positive consequence, they are less reliant on mental

healthcare services, and can eventually contribute to more effective use of mental healthcare resources (McAllister et al., 2012). Students displaying higher levels of well-being might also be more likely to seek for information regarding their mental health and are more likely to be ready for change (Harvey et al., 2012). This relates to the findings of Hooper & Huffman (2014), who found that lower levels of functioning and well-being may influence how closely students feel compelled to seek out help for their mental health problems. If they display lower levels of well-being, they might feel less invested in their care or even less power to take care of their mental health. Furthermore, this goes hand in hand with what Diener & Biswas- Diener (2005) found. They mentioned that positive affect as an aspect of well-being frequently precedes and results from psychological empowerment. Investigating this was relevant since other studies had only researched the relationship of empowerment on well-being (Woodall et al., 2010). For example, Finfgeld (2004) discovered that empowerment improves the well-being of those who have ongoing mental health issues. Additionally, another study found evidence that people's participation in various environmental contexts, other than mental healthcare, helps to empower them, which also furthers their well-being (Marimuthu, Taghizadeh, and Kandampully, 2022). Therefore, it was necessary to find out how well-being is associated with engagement in self-management activities in mental healthcare among students.

In general, the research shows that general depression and dysphoria in students are associated with empowerment, while social anxiety and panic did not show that students are less inclined to take care of their mental health. Well-being was found to show a positive association and as a result, it can be assumed that emphasizing well-being can raise the level of empowerment, and ultimately raise the standard of mental healthcare (Diener & Biswas-Diener, 2005). The observations that were made in this study can be used at universities to improve students' empowerment and well-being. For example, universities can create interventions to help students experiencing mental health difficulties by understanding the association between psychopathological symptoms, well-being, and empowerment. A similar approach was previously done by a student organisation at the University of Minnesota. They conducted events and created workshops focusing on mental health difficulties among students in graduate programmes. It was important to make sure graduate students are aware of the services and resources on campus that are available to them. Therefore, they tried to promote the abilities that empower students to deal with their difficulties (Mousavi et al., 2018). The implications found in this research can be used to raise awareness that depressive symptoms could prevent students from getting the mental health care they need. It was found

that students are at increased risk of psychopathological symptoms (Duffy et al., 2019). Therefore, this study researched the role of psychopathological symptoms and well-being among students and its association with empowerment. This study found that students dealing with depression or dysphoria are less inclined to take care of their mental health. This knowledge can be used to empower students as well as give them the skills to manage their emotions. As a result, this may give them a stronger sense of control over their mental health and well-being.

Strengths and limitations of this study

Little research could have been found that examined the association between mental health with empowerment, especially studies having their focus on students. Previous work has mentioned that less than 20% of students who met the diagnostic criteria for mental disorders were aware of their high symptomatic load (Duffy et al., 2019). Therefore, this study looked at a non-clinical sample since many students are not aware they meet the diagnostic criteria for a mental health condition. Making use of a non-clinical sample is valid and common since psychopathological symptoms are on a continuum with normal experiences and can help to understand psychopathology. Thus, exploring the role of empowerment in a non-clinical population was thus justified. It is hypothesized that all young people share some psychological traits, which makes it possible to understand the association between psychopathology, well-being, and empowerment also among a non-clinical sample (Grealish et al., 2016). Therefore, this study is valuable for future research concerning young adults dealing with mental health problems and if they can control the areas of their lives that are related to their mental health and can make decisions about their health. This report was able to present some significant associations which can help raise the standard of mental healthcare. As a result, healthcare legislators and governments can anticipate that people who are engaged in their care will manage self-care more effectively which in turn can lower the financial pressures on the healthcare industry (Holmström & Röing, 2010). Furthermore, the knowledge gained from the young adults' personal experiences dealing with their mental health and mental health care is increasingly thought to be complementary to that of experts and crucial for the success of treatment and raising the standard of care (Castro et al., 2016). The knowledge gained in this study may also be useful for measuring empowerment and using the data to enhance procedures that promote self-management. This may be crucial to enhancing mental healthcare results because self-management is so vital to mental health outcomes (Hibbard et al., 2006). Regarding the design, this study made efforts to make the claims that were made as reliable as possible by making sure that incomplete data was deleted

and controlling for biases. Moreover, having a reliable and valid measurement tool to assess empowerment, opens a number of possibilities for improving care and health outcomes. The study results suggest that if empowerment is high, a variety of improved behaviours may be able to follow among students regarding their mental healthcare (Hibbard et al., 2006). Another strength is that the IDAS-II was created specifically to incorporate the many scales assessing the symptoms of depression and anxiety, unlike other tests. Furthermore, the IDAS-II item pool includes a variety of symptoms associated with anxiety and depression. These items' inclusion aided in the design of depression scales with strong discriminant validity as well as complementary anxiety scales (Watson et al., 2012). Furthermore, the good to excellent reliability of the subscales implies that the items in the sub-scales are consistently measuring the same underlying construct.

However, some study limitations should be considered when interpreting the results of the study. First, convenience sampling was used as the technique to compile the sample for this study. The responders were chosen based on their availability and interest in taking part in the research (Nikolopoulou, 2022). Therefore, the respondents consisted of UT students, friends, and acquaintances of the researcher. As a result, the selection of participants was not representative of the target population, leading to an unrepresentative sample. This could lead to biases and limit the generalisability of the research. Furthermore, a limitation worth mentioning is that the sample was non-clinical and consisted of only 76 participants. Therefore, the results must be considered in light of the fact that some students display low symptomatic load. Additionally, since the study provides us with cross-sectional data this does not allow us to make any causal conclusions. There is no way to surely tell whether the variables are causing higher or lower levels of empowerment among students. Lastly, a limitation is that with the design of this study in the form of questionnaires, you receive inadequate depth of information from your participants. The IDAS-II and PAM-MH questionnaires have predefined, structured response options according to the Likert scale, which may make it difficult for respondents to give lengthy explanations. This restriction limits the amount of detail that you may be able to collect, which may lead to the loss of important context and information.

Future directions

In line with the limitations directions for future research are to do power calculations before the start of the study to achieve the ideal sample size. A sample consisting of young adults suffering from diagnosed depression and/or anxiety who are in treatment would also be interesting to find out how they adhere to treatment, self-manage their mental health, and test

their knowledge of their mental health problems. Another future suggestion would be to conduct the study as a longitudinal study. This can provide more insights into the development and progression of psychopathological symptoms and their impact on empowerment over time. This would help understand the relationship between the two of them as well as identify other critical factors that may influence empowerment. Lastly, investigating with the addition of objective measures would be useful. Complementing self-report measures with objective assessments, such as clinician evaluations or behavioural observations will enhance the validity and reliability of the findings. The objective measures could provide a more comprehensive understanding of psychopathological symptoms and well-being.

Conclusions

The current study found a positive significant association between well-being and empowerment. Furthermore, it found negative significant associations between general depression and dysphoria with empowerment; however, it did not find a statistically significant association between social anxiety and panic with empowerment. Most importantly this study has placed an emphasis on investigating students and their susceptibility to mental health problems and their wellbeing regarding their engagement in their mental healthcare. The findings in this study demonstrate the negative association of both general depression and dysphoria with empowerment. As a result, it is important to address mental health problems among students, particularly those symptoms associated with depression, to empower students and help them in taking control of their life and health decisions. This implies, for future research, that creating programs to increase empowerment may benefit students who are dealing with these psychopathological symptoms.

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