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# DIMENSIONS OF SOCIAL-EMOTIONAL HEALTH IN FEMALE AND MALE STUDENTS AND THEIR STRESS COPING STRATEGIES\*

**Introduction:** Students experience elevated levels of stress. According to the covitality-based model of their social-emotional health, its dimensions include psychological "strengths" that contribute to shaping well-being and managing stress transactions.

**Research Aim:** The aim of the study was to identify differences and similarities in the level of psychological "strengths" between female and male students and to determine their relationship with the coping strategies they employ to deal with stress.

**Research Method:** The study utilized a diagnostic survey method and the CAWI (computer-assisted web interviewing) technique. The research material was collected using the Mini-COPE Inventory for Measuring Coping with Stress by Carver, adapted by Juczyński and Ogińska-Bulik, and the Social-Emotional Health Survey (SEHS) by Furlong in its version for higher education. The data analysis procedure included descriptive statistics and inferential statistical methods.

**Results:** The dimensions of students' social-emotional health were found to be at a medium level. The *self-belief* dimension scored significantly higher in male students, while the *belief in others* was found to be higher in female students. Among females, correlations were observed between *engagement in life* and the strategy of positive reappraisal, the *emotional component* of health and positive reappraisal, as well as *self-belief* and active coping. Among males, *engagement in life* correlated with the strategy of behavioral disengagement. Predictors of students' psychological strengths included strategies such as positive reappraisal, acceptance, behavioral disengagement, self-blame, use of psychoactive substances, and humor. Positive reappraisal, seeking emotional support, active coping, and turning to religion were found to be predictors of health dimensions among females.

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**Conclusions:** Gender differences were identified in terms of the level of development of social-emotional dimensions of health and their relationship with the stress coping strategies adopted.

Keywords: students, stress, coping, social-emotional health, psychological strengths

#### INTRODUCTION

Stress is an inherent part of our daily life. Research indicates that the period of university studies, which marks the transition to adulthood, is associated with many educational, social, emotional, and economic challenges and therefore students experience higher levels of stress compared to the general population (Furlong et al., 2017; Gustems-Carnicer et al., 2019; Lyrakos, 2012; McIntyre et al., 2018). Moreover, various studies suggest that women tend to perceive stress more intensely than men (Bonneville-Roussy et al., 2017; Moksnes et al., 2010). The COV-ID-19 pandemic produced additional sources of stress with the necessity to adapt to remote learning, challenges related to the use of technology, concerns about completing studies, and limitations in interpersonal interactions within the academic environment. All these turned out to be a significant burden for students (Aristovnik et al., 2020; Misca & Thornton, 2021). Researchers attribute the greater stress experienced by women to the number of social roles they fulfil. Women tend to be, in particular, more engaged in household management and childcare. Consequently, the nature of stress they experience differs from that of men, who often manage to focus primarily on their professional role. Family responsibilities may conflict with career demands; hence some stress-inducing situations may affect women to a greater extent than men (Brannon, 2002).

In the framework by Lazarus and Folkman, stress is defined as a particular relationship between an individual and their environment, assessed by the individual as taxing or exceeding their resources and threatening their well-being. This experience involves making an effort to cope in various situations, referred to as coping strategies (Lazarus & Folkman, 1984). Coping strategies can be categorized into three main types: task-focused, emotion-focused, and avoidance-oriented (Endler & Parker, 1990). Studies examining factors that influence the choice of coping strategies among men and women, particularly those based on socialization theories, suggest that women are expected to respond to stress emotionally, whereas men are expected to engage in active problem-solving (Brannon, 2002).

The definition of "good health" proposed by the World Health Organization in 1948, which emphasizes that it is not merely the absence of disease but also encompasses physical, mental, and social well-being, has prompted research on health and its determinants from a salutogenic perspective. This approach focuses on identifying positive indicators of health across its various dimensions. Accord-

ing to Antonovsky's salutogenesis theory, developed within the stress paradigm, an individual's health status can be conceptualized as a hypothetical continuum between health and illness. Movement toward optimal health depends on the effective use of available resources. In Antonovsky's view, one of the key determinants of good health is the ability to cope effectively with everyday stress by employing strategies that facilitate both problem resolution and the attainment of a positive emotional state (Antonovsky, 1995). Numerous studies suggest that coping strategies can have both positive and negative effects on health (Carver & Vargas, 2011; Park & Adler, 2003; Siegrist & Rödel, 2006). The effectiveness of a particular coping strategy in a stressful situation and its subsequent health outcomes are influenced by multiple factors (Carver & Scheier, 1994; Folkman & Moskowitz, 2004; Ogińska-Bulik & Juczyński, 2010). However, research consistently indicates that task-focused coping strategies are the most beneficial (Sek & Pasikowski, 2001; Wrona-Polańska, 2003). Studies conducted among university students have shown that frequent use of these strategies is associated with lower stress levels (Morento et al., 2024).

With the development of positive psychology, the traditional understanding of mental health as the absence of psychiatric symptoms has been expanded to include "positive" aspects of human functioning (Diener, 2009; Seligman & Csikszentmihalyi, 2000; Suldo & Shaffer, 2008). In recent years, researchers have focused on identifying the "psychological strengths" that contribute to well-being and life satisfaction, while also serving as buffers against mental health problems. The role of self-efficacy in initiating and performing actions required to achieve goals, as well as its influence on persistence in pursuing them, has been emphasized (Bandura, 1997).

Studies indicate that a higher sense of self-efficacy prevents stress (Guo et al., 2022) and is positively associated with students' mental well-being (Gabryś, 2023). Research also confirms the protective role of positive emotionality (Franke et al., 2017) and social support (You, Lee et al., 2018; You, Lim et al., 2018) when it comes to levels of life satisfaction. The particular role of cognitive reappraisal in emotion regulation throughout stressful transactions and its connection to psychological resilience has also been highlighted (Cutuli, 2014; Yıldırım et al., 2017).

Within this approach, the psychological construct of *covitality* has been proposed. Covitality is considered to be the result of the interaction between certain blocks of an individual's "psychological strengths", which are related to healthy development, subjective well-being, and quality of life (Furlong et al., 2014). The concept of covitality forms the theoretical basis for the social-emotional health model developed by Furlong and colleagues (2013, 2014, 2017). This model suggests that addressing key developmental tasks is linked to having the social and emotional competencies appropriate to a given stage of development (Greenberg et al., 2003, 2017). These competencies, understood as "strengths", serve as resources and are at the same time the dimensions of social-emotional health. This model also pro-

vides the theoretical foundation for the Social-Emotional Health Survey – Higher Education (SEHS-HE) developed for students (Furlong et al., 2017).

The SEHS-HE model encompasses 12 psychological constructs that form four latent "strengths" of mental health: *self-belief*, *belief in others*, *an emotional component*, and *engagement in life*. *Self-belief* includes self-efficacy, self-awareness, and persistence. *Belief in others* is operationalized through the sense of community and belonging within the family and academic community, as well as the feeling that in difficult situations one can rely on receiving emotional support from family (family support), friends and peers (peer support), and the institution (institutional support). The "strength" of the *emotional component* includes cognitive reappraisal, empathy, and self-regulation. *Engagement in life* includes three constructs drawn from the literature on positive psychology: gratitude, zest, and optimism. These encompass appreciating relationships with others, enthusiasm, vitality, and a positive attitude toward life, even in the face of uncertain situations (Furlong et al., 2017).

Research results involving student samples confirm the role of social and emotional competencies, identified as "strengths", in shaping students' well-being and satisfaction with life. These competencies are linked to academic success (Robbins et al., 2004) and play a role in the processing of stressful transactions (Taylor & Stanton, 2007). In this context, researchers have demonstrated the significance of self-efficacy in the cognitive appraisal of stress and in selecting coping strategies (Denovan & Macaskill, 2017; Freire et al., 2018, 2020). They have also highlighted the connection between the level of stress perceived by students and their ability to rely on social support (Reeve et al., 2013; Yıldırım et al., 2017). Additionally, studies show that the level of stress experienced by students is related to the coping strategies they employ – those who more often use task-focused strategies tend to report lower levels of stress (Morento et al., 2024).

# RESEARCH AIM AND QUESTION

The aim of our research was to explore the differences and similarities in the levels of "strengths" as dimensions of social-emotional health among female and male students, and to determine their correlations with the coping strategies employed by students in dealing with stress. The following research questions and hypotheses were formulated:

What are the dimensions of social-emotional health developed among female and male students?

What is the relationship between the dimensions of social-emotional health among female and male students and their preferred stress coping strategies?

What is the proportion of the coping strategies used by female and male students in shaping the "strengths" of their social-emotional health?

H1: Female and male students differ in terms of the level of development of social-emotional dimensions of health.

H2: There is a relationship between the dimensions of social-emotional health and the coping strategies preferred by female and male students.

H3: There are dependencies between the use of specific coping strategies and the level of "strengths" of social-emotional health.

#### RESEARCH METHOD AND SAMPLE CHARACTERISTICS

The research utilized the diagnostic survey method and the CAWI (computer-assisted web interview) technique. The study was conducted among students of a higher education institution attending a full-time course of study. The non-probability sampling method was used, where participants were randomly selected. The online survey link was sent via the internal student registration system of one of the Kraków universities. The invitations to the students included a link to the survey along with details of the study; access to the questionnaire was preceded by the student's consent to participate in the research. The research group consisted of 491 students. The majority of participants, 71.1% (n = 349), were women, 23.0% (n = 349), where women n = 32.0% (n = 349). 113) were men, and 3.3% (n = 16) of respondents declared an "other" gender; 2.6% (n = 13) of the participants did not answer this question. The average age of participants was M = 21.35, SD = 2.84, with an age range from 17 to 39 years. The survey link was sent to the students' email addresses registered at the university domain. The study period was from September to December 2023. The research project received a positive opinion from the Research Ethics Committee of the Faculty of Philosophy at the Jagiellonian University (KE/70\_2022 from January 13, 2023).

The research material was collected using two standardized tools: the Coping Inventory (Mini-COPE) and the Social-Emotional Health Scale for Higher Education (SEHS-HE).

The Mini-COPE Inventory for Measuring Coping with Stress (Juczyński & Ogińska-Bulik, 2012) is the Polish version of the Mini-COPE tool originally developed by Carver (1997). It consists of 28 statements corresponding to 14 coping strategies (with two statements for each strategy). Responses are rated on a scale from 0 (almost never) to 3 (almost always). Factor analysis of the Polish version of the scale revealed seven factors: *active coping* (including active coping, planning, and positive reinterpretation), *helplessness* (including strategies like substance use, disengagement, and self-blame), *seeking support* (including seeking emotional and instrumental support), *avoidance behaviours* (including distraction, denial, and venting), as well as three strategies forming independent factors: *turning to religion*, *acceptance*, and *sense of humour*. The reliability of the tool, as assessed in a study involving 200 individuals aged 25–60, showed Cronbach's alpha coeffi-

cients for the seven factors ranging from 0.62 to 0.89 (Juczyński & Ogińska-Bulik, 2012). In the current study, Cronbach's alpha reliability coefficients for the Polish version of the tool used were close to 0.620 for most scales.

The Social-Emotional Health Survey (SEHS-HE) is the Polish version of the tool developed by Furlong et al. (2017), adapted according to the test adaptation methodology. It is a self-report tool consisting of 36 statements that measure the psychological construct of *covitality*, which encompasses four traits: *Self-Belief*, *Belief in Others*, the *Emotional Component*, and *Engagement in Life*. Each trait is measured by three subscales, with responses rated on a six-point scale ranging from "does not apply to me at all" to "applies to me completely". The range for each subscale is from 9 to 54. In the sample studied Cronbach's alpha reliability coefficients for the traits *Self-Belief*, *Belief in Others*, *Emotional Component*, and *Engagement in Life* were 0.831, 0.743, 0.620, and 0.868, respectively.

#### STATISTICAL DATA ANALYSIS PROCEDURE

The selection of statistical methods was based on their widespread use in social sciences. The data analysis procedure in this study included the application of both descriptive statistics and inductive statistical methods. At the preliminary stage, the distribution of the data was described and the mean and standard deviation for each dimension of health were calculated. This allowed for an overall characterization of the study sample (Bedyńska & Cypryańska, 2013). To compare the mean results between the two groups, a Student's *t*-test was used, and the effect size (ES) was also presented, which enabled the evaluation of the significance of the differences obtained (Field, 2013). Additionally, the correlation between variables was examined using Pearson's correlation analysis, which determined the strength and direction of the relationships involved. To model the relationships between variables, linear regression was used taking into account gender, which allowed for the analysis of effects for men and women (Bedyńska & Książek, 2012). All analyses were performed using PS Imago Pro 10 software (formerly SPSS).

#### **RESULTS**

The analysis of the social-emotional health dimensions of the students revealed that the average scores for the individual subscales ranged from 35.50 to 38.17, indicating a moderate level. With regard to the entire sample, the best-developed health dimension was the *emotional component* (M = 38.05). However, gender-based analysis revealed that it achieved the highest score only in women (M = 38.17). For men, the most developed health dimension was *self-belief* (M = 38.14).

Significant differences between male and female students were found in two health dimensions. *Self-belief* was statistically higher in men, as confirmed by the Student's t-test (p < 0.004). The effect size (ES = 0.287) indicates a moderate effect, suggesting that the gender difference in this dimension is moderate. In contrast, *belief in others* turned out to be higher in women. Differences between women and men in this dimension were also statistically significant (p < 0.012). The effect size (ES = 0.245) indicates a small-to-medium effect, suggesting that the difference is moderate, though slightly weaker than in the case of self-belief. For the remaining two dimensions – the *emotional component* and *engagement in life* – no statistically significant gender differences were observed (Table 1). The analysis allows for an only partial acceptance of hypothesis H1.

Table 1.

Mean and standard deviation statistics for Social-Emotional Health Dimensions

Dimension of health	Total (N	V = 491)	Wor (n =		Men (n	= 113)	р	ES
	M	SD	M	SD	M	SD	_	
Self-belief	36.49	7.47	36.06	7.25	38.14	7.34	.004	.287
Belief in others	35.81	7.93	36.34	7.69	34.42	8.18	.012	.245
Emotional component	38.05	5.51	38.17	5.22	37.56	5.99	.148	.113
Engagement in life	35.75	8.28	36.11	7.86	35.50	8.86	.246	.074

Source: Authors' own study.

In the next step, the relationship between the social-emotional health dimensions and preferred coping strategies was examined.

The research showed that the strategy of disengagement from efforts aimed at coping with the stressor negatively correlated with the health dimension of *self-belief* in both genders (r = -0.582), although a stronger correlation was observed in male than in female students (r = -0.652 and r = -0.554, respectively). The higher the sense of self-efficacy, perseverance, ability to determine the motives behind one's actions, and recognition of one's moods and feelings, the less likely the students were to give up on coping efforts. In the case of women, strong *self-belief* led to more frequent efforts at active coping in response to stress (r = 0.517). Furthermore, in men the strategy of disengaging also strongly and negatively correlated with their level of *engagement in life* (r = -0.502) – the less optimistic they were and the lower their level of life energy, the more frequently they gave up on active stress coping. High levels of *engagement in life* promoted coping through emotional support-seeking in male students (r = 0.499), but this relationship was stronger for women (r = 0.523). Additionally, for the female participants *engagement in life*, and to a lesser extent the *emotional component*, showed a positive correlation with the coping strategy based

on positive reappraisal (r = 0.544 and r = 0.501, respectively). The higher the levels of optimism and energy in female students, and the better developed their emotional competencies, the more likely they were to re-evaluate the situation in the coping process, seeking its positive reframing. It is worth noting that in the case of male students, there was a very weak relationship between the use of the positive reappraisal strategy and the health domain concerning the *emotional component* (r = 0.298). The results obtained allow for the partial acceptance of hypothesis 2 (Table 2).

Through regression analysis, it was possible to depict the relationships between stress coping strategies and social-emotional health dimensions, with gender included as control variable. The interpretation of the results will focus on the most significant relationships (Table 3).

The strategy of *positive reappraisal* proved to be a statistically significant predictor of the health dimension of *engagement in life* for both genders ( $\beta$  = 0.271 for women and 0.272 for men). This means that its use in demanding situations helps to increase the students' levels of optimism and life energy. Additionally, for female students this strategy is a strong predictor of the *emotional component* of health, positively influencing empathy, self-regulation, and positive thinking ( $\beta$  = 0.311).

In the case of a statistically significant relationship between the maladaptive coping strategy of disengagement and the social-emotional health dimensions for both men and women, the beta coefficients were negative, indicating that its use does not contribute to the development of health resources. This strategy proved to be a predictor for every health dimension in both female and male students, with the effect being notably stronger in men, where the highest beta coefficient was observed for the health dimension of *self-belief* ( $\beta$  = -0.563).

The use of the self-blaming strategy does not contribute to the development of social-emotional health resources, as it proves to be a statistically significant predictor of *engagement in life* and the *emotional dimension of health* for both genders ( $\beta$  = -0.225 for women and -0.262 for men, and  $\beta$  = -0.139 for women and -0.233 for men, respectively). In the case of women, the use of this strategy further decreases their *self-belief* ( $\beta$  = -0.152). On the other hand, the acceptance strategy proves to be a statistically significant predictor of the *emotional component* for both genders, though it is stronger in men ( $\beta$  = 0.116 for women and 0.210 for men).

For a statistically significant relationship, in both genders, between coping through the use of psychoactive substances and *belief in others*, the beta coefficient is negative ( $\beta$  = -0.124 for women and -0.206 for men), which means that students are more likely to resort to psychoactive substances the lower their sense of support from peers, family, and the university.

Another predictor of student health is a strategy referred to as a sense of humour. Statistically significant relationships are found here with belief in others ( $\beta=0.116$  for women and 0.267 for men), which means that sense of humour contributes to strengthening the sense of community and integration with family and peers.

Correlation Matrix for Social-Emotional Health Dimensions and Stress Coping Strategies, for the entire sample and for female and male groups Table 2.

	Variables	Active	Plan- ning	Positive reap- praisal	Taking psycho-active sub-stances	Disen- gage- ment	Self- -bla- ming	Seeking emotio- nal support	Seeking instru- mental support	Seeking distrac- tion	Denial	Acting	Turning to reli- gion	Accep- tance	Sense of humour
	Self-belief	.499**	.360**	.317**	215**	582**	345**	.375**	.036	152**	238**	033	.175**	.252**	022
Total	Total Belief in others	.162**	.127**	.243**	228**	253**	173**	.442**	.369**	088	101*	.103*	.116*	.126**	*560.
N = 491	Emotional component	.364**	.341**	.456**	155**	381**	319**	.329**	.073	022	053	.029	.157**	.277**	.025
	Engagement in life	.379**	.284**	.547**	138**	411**	379**	.499**	.297**	058	046	.123**	.286**	.212**	*260°
	Self-belief	.517**	.390**	.319**	210**	554**	370**	.415**	890.	106*	212**	.047	.151**	.231**	037
Wo-	Belief in others	.200**	.163**	.249**	215**	237**	206**	.447**	.344**	091	103	060.	.125*	620.	.050
men $n = \frac{n}{2}$	Emotional component	.340**	.323**	.501**	188**	362**	342**	.371**	060.	.033	049	.040	.168**	.278**	.050
248	Engagement in life	.392**	.284**	.544**	150**	391**	385**	.523**	.300**	031	050	.139**	.262**	.192**	.122*
	Self-belief	.440**	.305**	.182	188*	652**	285**	.292**	-0.004	194*	231*	106	.203*	.219*	051
Men	Belief in others	.036	.002	.114	238*	353**	145	.344**	.372**	104	181	.045	.073	.226*	.290**
<i>n</i> = 1113	Emotional component	.361**	.330**	.298**	077	426**	321**	.169	.004	158	061	013	.100	.273**	043
	Engagement in life	.352**	.299**	.458**	072	502**	380**	.417**	.310**	990:-	024	290.	.341**	.215*	.033
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 $^{\star}p < 0.05; ^{\star\star}p < 0.01$ 

Source: Authors' own study.

Social-Emotional Health Dimensions and Stress Coping Strategies in female and male groups

		Self-	Self-belief			Belief ir	Belief in others		Em	notional	Emotional component	ent	H	Engagement in life	ent in life	
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muepemem variame	beta	р	beta	р	beta	р	beta	ф	beta	d	beta	d	beta	d	beta	р
Active coping	0.185	0.005	0.088	0.434	-0.244	0.001	-0.157	0.181	-0.002	0.981	0.085	0.505	-0.019	0.759	0.086	0.415
Planning	0.043	0.419	-0.045	0.645	0.011	0.858	-0.152	0.134	0.059	0.295	0.114	0.306	-0.048	0.350	-0.033	0.718
Positive reappraisal	0.043	0.387	0.027	0.754	0.038	0.515	0.026	0.767	0.311	0.000	0.166	0.091	0.271	0.000	0.272	0.001
Taking psychoactive substances	-0.070	0.101	-0.013	0.865	-0.124	0.012	-0.206	0.012	-0.082	0.069	0.046	0.602	-0.018	0.663	-0.003	0.968
Disengagement	-0.297	0.000	-0.563	0.000	-0.125	0.029	-0.398	0.000	-0.128	0.015	-0.252	0.023	-0.168	0.000	-0.309	0.001
Self-blaming	-0.152	0.001	-0.085	0.296	-0.119	0.025	-0.032	0.701	-0.139	0.004	-0.233	0.013	-0.225	0.000	-0.262	0.001
Seeking emotional support	0.191	0.009	0.158	0.146	0.450	0.000	0.248	0.029	0.255	0.001	0.031	0.799	0.346	0.000	0.160	0.117
Seeking instrumental support	-0.158	0.005	-0.136	0.193	0.104	0.110	0.187	0.084	-0.120	0.046	-0.065	0.581	0.051	0.347	0.126	0.198
Seeking distractions	-0.039	0.352	0.104	0.219	-0.011	0.815	0.036	0.683	0.071	0.108	0.049	0.612	0.039	0.330	0.137	0.085
Denying	-0.012	0.794	-0.070	0.402	-0.036	0.493	-0.043	0.619	0.091	0.061	0.009	0.927	0.052	0.236	0.063	0.420
Acting out	0.048	0.267	0.020	0.809	-0.017	0.732	0.036	0.677	-0.029	0.522	0.080	0.398	0.003	0.936	0.107	0.172
Turning to religion	0.056	0.201	-0.032	0.702	0.052	0.303	-0.091	0.300	0.032	0.489	-0.100	0.297	0.103	0.014	0.062	0.435
Acceptance	0.078	0.079	0.141	0.089	-0.063	0.220	0.123	0.149	0.116	0.014	0.210	0.026	-0.002	0.964	0.126	0.104
Sense of humour	-0.029	0.521	0.022	0.781	0.116	0.025	0.267	0.002	-0.035	0.459	-0.029	0.750	0.101	0.018	0.034	0.646
	R2 =	= 0.44	R2 =	R2 = 0.41	R2 =	R2 = 0.26	R2 =	R2 = 0.37	R2 = 0.38	0.38	R2 =	= 0.25	R2 = 0.49	0.49	R2 = 0.49	0.49
Model statistics	F=2	20.661	$F = \epsilon$	F = 6.659	F = 9	= 9.644	F = 5.729	5.729	F = 16.017	5.017	F = 3.618	3.618	F = 24.778	4.778	F = 8.592	.592
	<i>b</i> <	p < 0.000	) > d	p < 0.000	p < 0	< 0.000	) > d	p < 0.000	p < 0	p < 0.000	p < 0	< 0.000	p < 0.000	000	p < 0	< 0.000
f - momen: m - men																

f = women; m = men Source: Authors' own study. In the case of statistically significant relationships observed only among women, the regression results indicate that an important predictor for enhancing their socio-emotional health is the coping strategy of seeking emotional support. A positive relationship was observed for each dimension of health: *engagement in life* ( $\beta = 0.346$ ), *belief in others* ( $\beta = 0.450$ ), the *emotional component* ( $\beta = 0.255$ ), and *self-belief* ( $\beta = 0.191$ ).

In contrast, the strategy of seeking instrumental support emerges as a predictor of *self-belief*, but in this case, the relationship is negative ( $\beta$  = -0.158). Additionally, the strategy of active coping is also identified as a predictor of socio-emotional health in female students. A statistically significant positive relationship is observed for *self-belief* ( $\beta$  = 0.185), while a negative relationship is found for *belief in others* ( $\beta$  = -0.244). This suggests that frequent use of active coping strategies by female students contributes to the strengthening of their socio-emotional health resources, particularly in terms of self-efficacy, perseverance, and self-awareness. The analysis also shows that, among female students, *engagement in life* is predicted by seeking solutions to life problems through faith, prayer, or meditation, although this relationship is weak ( $\beta$  = 0.103).

In light of these findings, hypothesis 3, which assumed the existence of relationships between the use of specific coping strategies and the level of "strengths" in socio-emotional health, has been confirmed.

#### DISCUSSION AND CONCLUSIONS

Studies conducted using the Social and Emotional Health Survey – Higher Education (SEHS-HE) revealed that the most well-developed dimension of socio-emotional health among the students surveyed turned out to be the *emotional component*. This finding aligns with other studies that have utilized the same measurement tool (Arslan et al., 2022; Furlong et al., 2017). At the same time, our study showed that this dimension reached the highest scores among women. This result is consistent with other research indicating that women have a greater ability to understand emotions compared to men, although findings on gender differences in emotion recognition remain inconclusive (Day & Carroll, 2004; Piekarska, 2015).

Conversely, statistically significantly higher *self-belief* scores were observed among men who exhibited the strongest development of this dimension. This finding is supported by other research showing that men tend to have a higher level of self-efficacy than women (Moksnes et al., 2010). Self-efficacy can be then considered to be a core resource of this dimension of health.

The results of the study showed that the lower the students' *self-belief*, measured by the sense of self-efficacy, perseverance, and self-awareness, the more often

they experienced helplessness in stressful situations, manifested as giving up on or discontinuing coping efforts. This finding is consistent with Bandura's (1997) self-efficacy theory, which states that the stronger an individual's belief in their ability to cope effectively with challenges, the more likely they are to take active measures in difficult situations, while low self-efficacy may lead to resignation and helplessness. Bandura (1997) also highlights that perseverance and self-awareness are key factors influencing effective stress management.

In Scheier and Carver's (1985) model of optimism and pessimism, individuals with higher optimism levels are more likely to engage in active coping strategies in stressful situations, whereas pessimists are more prone to withdrawal and resignation. Higher optimism is associated with *engagement in life* and greater satisfaction with interpersonal relationships. This corresponds with our findings, which showed that among the men in the study, resignation from active coping strategies increased as their levels of optimism, life energy, and satisfaction with interpersonal relationships – dimensions classified under *engagement in life* – declined. Among women, this dimension correlates with the use of positive reappraisal strategies.

Thus, the results obtained confirm the crucial role of socio-emotional health resources such as self-belief, optimism, and positive thinking in stress transactions that involve active coping strategies. Luthans et al. (2007) highlight the fact that these resources constitute a fundamental component of an individual's psychological capital. Individuals with higher levels of these resources are more resilient to stress and more likely to engage in effective coping strategies. The protective role of psychological capital resources in relation to adaptive coping strategies, as demonstrated in our study, is further supported by research conducted in 2024 on a sample of Spanish students (Moreno-Montero et al., 2024).

The analysis of the relationship between students' coping strategies and their socio-emotional health revealed that maladaptive strategies – such as disengagement or self-blame – fail to contribute to strengthening health resources in any of its dimensions. Another negative predictor of health was the use of psychoactive substances, as frequent reliance on this strategy was associated with a decreased sense of support from peers, family, and the university. This finding aligns with the existing literature (Cooper et al., 1992).

The relationships identified in our study also suggest that health resources may be potentially modified through the use of specific coping strategies. In light of our findings, particular attention should be given to the strategy of positive reappraisal as a predictor of *engagement in life* and the *emotional component* of socio-emotional health, for which acceptance also emerged as a predictor. This result is consistent with studies showing that attempts to reinterpret difficult situations by seeking positive meaning or alternative solutions are positively correlated with the activation of positive emotions and an increase in psychological well-being (Garza Varela et al., 2021; Mayordomo-Rodríguez et al., 2015; Nowlan et al., 2016).

Another positive predictor of socio-emotional health across all dimensions was the strategy of seeking emotional support, while active coping was a predictor of the health dimension encompassing self-efficacy, perseverance, and self-awareness. Notably, these relationships were significant only among women. Research on gender differences in students' coping strategies indicates that women are more likely to use these strategies (Theodoratou et al., 2023). Additionally, for female students seeking solutions through religion emerged as a positive predictor of socio-emotional health in the dimension of *engagement in life*. The effectiveness of this strategy is supported by studies demonstrating the health-promoting effects of religious engagement for both mental and physical health (Folkman & Moskowitz, 2004).

The findings presented here encourage further research aimed at determining the long-term effects of students' use of various stress coping strategies on their psychosocial functioning, mental well-being, and overall health.

The practical implications of the study's findings can be applied in university-based psychological support services as well as in pedagogical interventions within school education. University initiatives aimed at supporting students in demanding situations should be expanded to include training and workshops available to a broader student population. Strengthening students' psychological resources that promote adaptive coping strategies is crucial not only for managing everyday academic stress but also for handling situations that may generate heightened stress levels. This is supported by research conducted among Polish students during higher levels of stress caused by the negative effects of the COVID-19 pandemic, which demonstrated that positive coping strategies - particularly planning and active problem-solving - predominated over negative ones (Kawalec et al., 2023). At the school education level, there is a need to intensify efforts to enhance young people's social-emotional health resources. Such initiatives align with the World Health Organization's health education framework, developed in the 1990s, which emphasizes acquiring and developing life skills that foster proper psychosocial development, facilitate the achievement of developmental tasks, and improve an individual's ability to cope with difficulties (Woynarowska-Sołdan, 2022).

#### STUDY LIMITATIONS

The findings of similarities and differences in the levels of social-emotional health strengths between female and male students, as well as their relationship with the coping strategies they employ, have certain limitations, as the study was not conducted on the basis of a representative sample. However, the results obtained may provide valuable insights for designing programs aimed at strengthening the mental health resources of both female and male students.

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# WYMIARY ZDROWIA SPOŁECZNO-EMOCJONALNEGO STUDENTEK I STUDENTÓW A STOSOWANE PRZEZ NICH STRATEGIE RADZENIA SOBIE ZE STRESEM

**Wprowadzenie:** Studenci doświadczają wysokiego poziomu stresu. Zgodnie z opartym na koncepcji covitality modelem zdrowia społeczno-emocjonalnego studentów jego wymiary obejmują "mocne strony" psychiczne, które uczestniczą w kształtowaniu dobrostanu i przebiegu transakcji stresowych.

**Cel badań:** Celem badań było poszukiwanie różnic i podobieństw w poziomie "mocnych stron" studentek i studentów oraz określenie ich związku ze stosowanymi przez nich strategiami radzenia sobie ze stresem.

**Metoda badań:** W badaniach zastosowano metodę sondażu diagnostycznego oraz technikę ankiety internetowej CAWI. Materiał badawczy zebrano z wykorzystaniem Inwentarza do Pomiaru Radzenia Sobie ze Stresem (Mini-COPE) Carvera w adaptacji Juczyńskiego i Ogińskiej-Bulik oraz Skali Zdrowia Społeczno-Emocjonalnego Furlonga w wersji dla studentów. Procedura analizy danych obejmowała statystykę opisową oraz metody statystyki indukcyjnej.

Wyniki: Wymiary zdrowia społeczno-emocjonalnego studentów lokują się na poziomie średnim. Wymiar "wiara w siebie" uzyskał statystycznie istotnie wyższy wynik u mężczyzn a wymiar "wiara w innych" u kobiet. U kobiet wykazano korelacje między "zaangażowaniem w życie" a strategią pozytywnego przewartościowania, komponentem emocjonalnym zdrowia a strategią pozytywnego przewartościowania oraz "wiarą w siebie" a aktywnym radzeniem sobie. U mężczyzn "zaangażowanie w życie" korelowało ze strategią zaprzestania działań. Predyktorami "mocnych stron" studentów okazały się strategie pozytywnego przewartościowania, akceptacji, zaprzestanie działań, obwinianie siebie, sięganie po substancje psychoaktywne i poczucie humoru. Pozytywne przewartościowanie, poszukiwaniu wsparcia emocjonalnego, strategia aktywnego radzenia sobie oraz zwrot ku religii były predyktorami wymiarów zdrowia u kobiet.

**Wnioski:** W badanej próbie występują różnice międzypłciowe w odniesieniu do poziomu ukształtowania wymiarów zdrowia społeczno-emocjonalnego oraz ich związku ze stosowanymi strategiami radzenia sobie ze stresem.

**Słowa kluczowe:** studenci, stres, radzenie sobie, zdrowie społeczno-emocjonalne, mocne strony psychiczne