



Links between subjective health, wellbeing, and psychological capital in adolescents' sample

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ABSTRACT

The links between subjective health, psychological wellbeing, and psychological capital in adolescence are under-researched, even though a lot of studies investigated links between health and wellbeing in adult population. The purpose of this research was to examine psychological wellbeing and psychological capital in groups of subjectively healthy and unhealthy adolescents and identify significant associations. The survey has revealed that, in general, the subjective health relates to psychological capital and psychological wellbeing in adolescent sample. The structural model on associations between the study variables demonstrated some significant links between self-reported quantity of illnesses, psychological wellbeing, and psychological capital ($\chi^2 = 101.4728$; $DF=24$; $RMSEA=0.0649$ [0.0522- 0.0782]; $CFI=0.9145$; $NFI=0.8933$; $TLI=0.8997$; $p=0.000$). However, the limitation of this study was that the information on health was self-reported and not checked in a clinical report and the sample size was relatively small. In the future research, it would be essential to compare information on subjective and objective health status and evaluate psychological capital and wellbeing by objective health-illness groups.

Keywords: psychological capital; psychological wellbeing; health; illness; adolescents.

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INTRODUCTION

According to the World Health Organization, adolescence is the vulnerable period of human life from 10 to 19 years old, requiring specific attention in health programs and research [1].

The data on adolescents' health and psychological wellbeing has been collected across Europe and North America for more than 30 years as the Health Behavior in School-aged Children (HBSC) survey, initiated by the World Health Organization (WHO), has provided the foundation for comparative cross-national studies in 50 member countries [2].

The HBSC surveys on young people aged 11, 13 and 15 years are undertaken every four years to provide an overview of adolescent self-reported health and well-being, and the findings highlight that most adolescents across Europe and North America experience positive and supportive social relationships, relatively few health problems, and good overall health and well-being. Decline in psychological wellbeing is observed with an increasing age: older adolescents have lower levels of life satisfaction, are less likely to report excellent health and experience more frequent health complaints [2]. Despite the fact that prevalence of teenagers' multiple health complaints increased since 2014, the underlying mechanisms are still not sufficiently explored.

Furthermore, the relationship between health and psychological wellbeing has mostly been explored in adult populations [3,4,5,6]. Interestingly, some studies postulated wellbeing as a protective factor of health and long-term health indicators, reducing the risk of chronic physical illness and promoting longevity [7]. Since psychological wellbeing has been found to have an effect on health in adult populations, it is relevant to verify if this link also takes place in adolescent populations, as the literature analyzing the association between health and psychological wellbeing in adolescence is very limited. Moreover, it is not still clear what factors contribute to an increase in the psychological wellbeing of objectively and subjectively unhealthy individuals, especially adolescents.

Some promising findings indicate the possibility of increasing psychological wellbeing through the related variables, for example, psychological capital, which was found to be positively related to wellbeing and health [8]. Still, it is not clear whether psychological capital contribute to wellbeing if a person has already

been ill. Furthermore, the psychological capital as contributing to adolescents' psychological wellbeing is also under-researched [9].

Psychological capital (PsyCap) is a relatively new construct, which was defined as individuals' positive state of development and is characterized by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making positive attributions (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" [10, p.3]. Thus, PsyCap refers to a positive assessment of one's capability to overcome difficulties with continued effort, and this assessment reflects four dimensions: hope, self-efficacy, resilience, and optimism.

Research has acknowledged relations between psychological capital (PsyCap) and wellbeing outcomes, including health [8]. Anyway, there is lack of research on these associations in the adolescents' sample. A review of the literature revealed only six empirical studies to date that have examined PsyCap among school-age youth [9].

Research indicates that individuals higher on PsyCap in the health domain are more likely to engage in opportunities to sustain and improve health and more likely to persist in efforts to achieve health-related goals. Furthermore, positive health experiences, such as coping with illness or disability, are likely to set positive development whereby individuals come to see themselves as more capable of taking on more significant challenges with each success [8]. However, there is little evidence whether this applies for the adolescents' population [9] and whether wellbeing is a protective factor of adolescent health [11].

Taken together, studies with youth are limited and have not yet explored the links between subjective health, psychological capital (self – efficacy, hope, resilience, and optimism) and wellbeing (life satisfaction, flourishing, negative emotions, and positive emotions). In this paper, we hypothesized that older adolescents' (1) psychological capital predicts psychological flourishing, and (2) subjective health relates to psychological capital and psychological wellbeing.

MATERIAL AND METHODS

Sample

In this study, a simple random sample consisted of 153 adolescents aged 16.6 years (± 1.23 SD), and 62 % were female. The procedure was administered online and followed the General Data Protection Regulation (GDPR) guidelines. Before data gathering, this study was reviewed and approved by the research ethics board of the Institute of Management and Psychology and followed the requirements of the Helsinki Declaration.

Measures

This study used three instruments to assess psychological wellbeing (FS, SWLS, SPANE), one instrument to assess psychological capital (PCQ-24), and one instrument to assess subjective health.

To assess psychological flourishing, we applied the Flourishing Scale (FS) of Ed Diener and colleagues [12], consisting of 8 items. The FS is free to use without permission for research purposes, as indicated by the authors of the scale. The Flourishing Scale is a measure of the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism. The scale provides a single psychological wellbeing score. In the youth's study, the response pattern followed a 5-point Likert scale ranging from 5 (totally agree) to 1 (totally disagree). This scale includes the following items: "I lead a purposeful and meaningful life," "My social relationships are supportive and rewarding," "I am engaged and interested in my daily activities," "I actively contribute to the happiness and wellbeing of others," "I am competent and capable in the activities that are important to me," "I am a good person and live a good life," "I am optimistic about my future," "People respect me." Cronbach's alpha for the FS items in the youth sample was .83.

To assess life satisfaction, we applied Satisfaction with Life Scale (SWLS) of E. Diener and colleagues [13]. The SWLS is free to use without permission for research purposes, as indicated by the authors of the scale (Ed Diener, Robert A. Emmons, Randy J. Larsen and Sharon Griffin as noted in the 1985 article in the *Journal of Personality Assessment*). The SWLS is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. In youth's study, the response pattern followed a 5-point Likert scale ranging from 5 (I fully agree) to 1 (I completely disagree). Cronbach's alpha for the estimate of the youth sample was .79.

To assess emotional wellbeing of youth, we applied the Scale of Positive and Negative Experience (SPANE) of E. Diener and colleagues [12]. The SPANE is a 12-item questionnaire that includes six items to assess positive feelings and six items to assess negative feelings. For both the positive and negative items, three items are general (e.g., positive, negative), and three per subscale are more specific (e.g., joyful, sad). The instructions are as follows: "Please think about what you have been doing and experiencing during

the past four weeks. Then report how much you experienced each of the following feelings, using the scale below. For each item, select a number from 1 to 5, and indicate that number on your response sheet". The response pattern followed a 5-point Likert scale ranging from 1 (very rarely or never) to 5 (very often or always). Cronbach's alpha was .78.

We applied the PCQ-24 scale [10] to assess respondents' positive psychological capital. The permission to use PCQ-24 for research purposes was given to Aiste Dirzyte by Fred Luthans in 2013. Psychological Capital or PsyCap is a higher-order construct consisting of four subscales, each comprised of six items each for a total of 24 items. The subscales include hope, efficacy, resilience, and optimism. Some sample items for PsyCap are the following: "I feel confident analyzing a long – term problem to find a solution" (Efficacy subscale); "There are lots of ways around my problem" (Hope subscale); "I always look on the bright side of things" (Optimism scale); and "I usually manage difficulties one way or another" (Resilience scale). In the youth's study, the response pattern followed a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). In the present study, Cronbach's alpha was .91 for youth sample and ranged from .83 to .93 for the subscales of self – efficacy, hope, optimism, and resilience.

To evaluate youth's subjective health, we have applied the following questions: "Have you ever experienced... (Speech difficulties, Attention Deficit Hyperactivity Disorder, Hearing difficulties, Vision difficulties, Emotional and Behavioral difficulties, Learning difficulties, Autism Spectrum Disorder, Physical disability, Serious Physical illness (cancer, cardiovascular, etc.), Other illness, None of the above". The response alternatives provided were "yes" and "no."

Statistical Analyses

For data analysis we used SPSS v.26.0. As the data were not normally distributed, we used nonparametric Mann Whitney (U) test to compare results between groups of subjectively healthy and unhealthy individuals. We calculated Spearman rho nonparametric correlations to evaluate associations between the study variables. In this research, we considered p-values less than 0.05 to be statistically significant. As mentioned above, we have also calculated the internal consistency of all variables (Cronbach's alpha). Besides, we conducted structural equation modelling to analyze the links between the study variables.

The structural equation modelling (SEM) was conducted using AMOS v.26.0. Model fit was evaluated based on the CFI (Comparative Fit Index), the Normed Fit Index (NFI), the Tucker – Lewis coefficient (TLI), RMSEA (Root Mean Square Error of Approximation), and SRMR (Standardized Root Mean Square Residual), whereas the χ^2 was used for descriptive purposes only, because it is highly sensitive to sample size. The values higher than 0.90 for CFI, NFI, TLI and values lower than 0.08 for RMSEA and SRMR were considered as indicative of an acceptable fit [14].

RESULTS

The frequency of young respondents' self- reported health-related experiences are presented in Table 1. Almost 20 percent of respondents reported that they have never experienced any health-related difficulties. Interestingly, almost 46 percent of adolescents reported that they had experienced learning difficulties, and almost 40 percent reported that they had experienced emotional and behavioral difficulties. It is important to note that these numbers reflect the subjective opinion, as the objective health status was not measured.

TABLE1: FREQUENCY OF ADOLESCENTS' SELF- REPORTED HEALTH-RELATED EXPERIENCES

Subjective health report	Percent
Speech difficulties	42.5
Attention Deficit Hyperactivity Disorder (ADHD)	34.6
Hearing difficulties	21.6
Vision difficulties	42.5
Emotional and Behavioral difficulties (EBD)	39.9
Learning difficulties	46.4
Autism Spectrum Disorder	11.8
Physical disability	15.0
Serious Physical illness (cancer, cardiovascular, etc.)	17.6
Other illness	26.1
None of the above	20.3

Means and standard deviations of the study variables are presented in Tables 2-3. Descriptives of flourishing, life satisfaction, positive and negative emotions, and self - reported health-related experiences of adolescents are presented in Table 2.

TABLE2: DESCRIPTIVES OF FLOURISHING, LIFE SATISFACTION, EMOTIONS, AND SELF - REPORTED HEALTH-RELATED EXPERIENCES

Subjective health report	Flourishing		Life satisfaction		Positive emotions		Negative emotions	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
HEALTHY	4.2042	.65116	4.1000	.79438	4.0500	.70595	2.3556	1.04472
Speech difficulties	3.9101	.69787	3.6772	.82006	3.8626	.70859	2.4181	.77480
ADHD	3.9441	.64942	3.7745	.89890	3.8688	.75336	2.3972	.82353
Hearing difficulties	3.8750	.61601	3.7586	.71789	3.8103	.72200	2.3851	.75738
Vision difficulties	3.8686	.60281	3.6068	.87649	3.7316	.65142	2.5452	.83209
EBD	3.8080	.73507	3.5821	.93752	3.7679	.69025	2.5030	.83151
Learning difficulties	3.8615	.71641	3.5877	.86160	3.7026	.65979	2.5436	.88008
Autism Spectrum Disorder	4.0750	.56061	4.1067	.83449	4.0444	.77014	2.4778	1.0056
Physical disability	3.8250	.89901	3.8200	1.0380	4.1000	.66973	2.3500	1.0114
Serious Physical illness	4.0284	.63261	4.0000	.83723	4.1061	.59661	2.4394	.94916
Other illness	3.7647	.65335	3.7294	.92361	3.8284	.72993	2.5833	.83912

Means and standard deviations of psychological capital, self-efficacy, hope, resilience, optimism, and self - reported health-related experiences of young respondents are presented in Table 3.

TABLE3: DESCRIPTIVES OF PSYCHOLOGICAL CAPITAL (SELF-EFFICACY, HOPE, RESILIENCE, OPTIMISM) AND SELF - REPORTED HEALTH-RELATED EXPERIENCES

Subjective health report	Psychological Capital		Self- efficacy		Hope		Resilience		Optimism	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
HEALTHY	3.8798	.63774	3.9551	.81589	4.1154	.70359	3.7436	.64331	3.7051	.76203
Speech difficulties	3.6314	.54964	3.6154	.77018	3.7564	.76302	3.6795	.54217	3.4744	.66042
ADHD	3.5824	.58803	3.5659	.87525	3.7171	.75201	3.6589	.55510	3.3876	.67330
Hearing difficulties	3.7546	.54857	3.7778	.84479	3.8519	.75154	3.8519	.46071	3.5370	.64770
Vision difficulties	3.6414	.56874	3.6458	.84031	3.6905	.81861	3.6577	.55361	3.5714	.66428
EBD	3.6500	.62261	3.6909	.81739	3.6848	.82132	3.6758	.61565	3.5485	.67026
Learning difficulties	3.6184	.62938	3.5820	.84766	3.7302	.79279	3.6905	.62063	3.4709	.69788
Autism Spectrum	3.8278	.50711	3.9778	.74766	3.9556	.78797	3.9333	.42164	3.4444	.49468
Physical disability	3.6732	.65237	3.7544	.80770	3.8070	.84119	3.7368	.67430	3.3947	.56440
Serious Physical illness	3.8618	.58086	3.9825	.71123	4.0614	.74372	3.9035	.56195	3.5000	.56108
Other illness	3.5078	.63044	3.4948	.86186	3.6094	.81826	3.5260	.57441	3.4010	.66782

Besides, Mann-Whitney U test has indicated that adolescents who reported the absence of ADHD demonstrated significantly higher mean rank scores for optimism ($U = 1464.000$, $Z = -2.109$, $p = 0.035$) than those who reported ADHD.

Mann-Whitney U test has also indicated that adolescents who reported absence of Learning Difficulties demonstrated significantly lower mean rank scores for negative emotions ($U = 1988.500$, $Z = -2.105$, $p = 0.035$) and significantly higher mean rank scores for self- efficacy ($U = 1646.000$, $Z = -2.299$, $p = 0.022$) than those who reported learning difficulties.

Surprisingly, Mann-Whitney U test has showed that adolescents who reported Autism Spectrum Disorder demonstrated significantly higher mean rank scores for life satisfaction ($U = 652.000$, $Z = -2.002$, $p = 0.045$) and resilience ($U = 603.500$, $Z = -1.939$, $p = 0.053$) than those who reported absence of Autism Spectrum Disorder.

Interestingly, Mann-Whitney U test has demonstrated that adolescents who reported previous experience of physical disability demonstrated significantly higher mean rank scores for positive emotions ($U = 879.500$, $Z = -1.997$, $p = 0.046$) than those who reported absence of physical disability.

Unexpectedly, Mann-Whitney U test has indicated that adolescents who reported experience of serious physical illness (cancer, cardiovascular) demonstrated significantly higher mean rank scores for positive emotions ($U = 873.500$, $Z = -2.517$, $p = 0.012$) than those who reported absence of serious physical illness (cancer, cardiovascular).

Mann-Whitney U test has also showed that adolescents who reported absence of other illness demonstrated significantly lower mean rank scores for negative emotions ($U = 1387.500, Z = -2.144, p = 0.032$) and significantly higher mean rank scores for flourishing ($U = 1366.500, Z = -2.250, p = 0.024$) than those who reported other illnesses.

The Spearman correlations (Table 4) indicated that there were significant negative associations between the number of self-reported diseases and psychological flourishing ($r_s = -0.210, p = 0.012$), self-efficacy ($r_s = -0.180, p = 0.040$), and hope ($r_s = -0.192, p = 0.028$).

Table 4: SPEARMAN CORRELATIONS BETWEEN THE NUMBER OF SELF-REPORTED ILLNESSES, PSYCHOLOGICAL CAPITAL, EMOTIONS AND FLOURISHING

	Self-reported quantity of illnesses	Flourishing	Negative emotions	Positive emotions	PsyCap	Self Efficacy	Hope	Resilience
Flourishing	-.210*							
Negative emotions	.145	-.247**						
Positive emotions	-.079	.442**	-.073					
PsyCap	-.166	.619**	-.172*	.367**				
Self Efficacy	-.180*	.585**	-.127	.331**	.889**			
Hope	-.192*	.657**	-.054	.329**	.840**	.703**		
Resilience	-.006	.461**	-.179*	.374**	.818**	.645**	.613**	
Optimism	-.171	.389**	-.255**	.209**	.773**	.561**	.502**	.571**

** - Correlation is significant at a 0.01 level, * - Correlation is significant at a 0.05 level

The Spearman correlations also indicated that there was a significant positive association between self-reported psychological flourishing and psychological capital ($r_s = 0.619, p < 0.001$), self-efficacy ($r_s = 0.585, p < 0.001$), hope ($r_s = 0.657, p < 0.001$), resilience ($r_s = 0.461, p < 0.001$), and optimism ($r_s = 0.389, p < 0.001$).

Furthermore, we conducted a multiple linear regression using psychological flourishing as the criterion (dependent variable) and psychological capital variables (self-efficacy, hope, resilience, and optimism) as the predictors (Table 5).

TABLE 5: MULTIPLE REGRESSION MODEL: THE DEPENDENT VARIABLE IS PSYCHOLOGICAL FLOURISHING, AND THE PREDICTORS ARE SELF-EFFICACY, HOPE, RESILIENCE, AND OPTIMISM

Model	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
(Constant)	1.649	.252		6.540	.000
Self-Efficacy	.142	.070	.185	2.036	.043
Hope	.387	.071	.478	5.447	.000
Resilience	.049	.087	.048	.563	.574
Optimism	.024	.074	.025	.325	.746

R=0.666, R Square =0.443, Adjusted R Square =0.429, Std. Error of the Estimate = 0.46681; R Square Change = 0.443, F (4,153) =30.459, $p < 0.001$

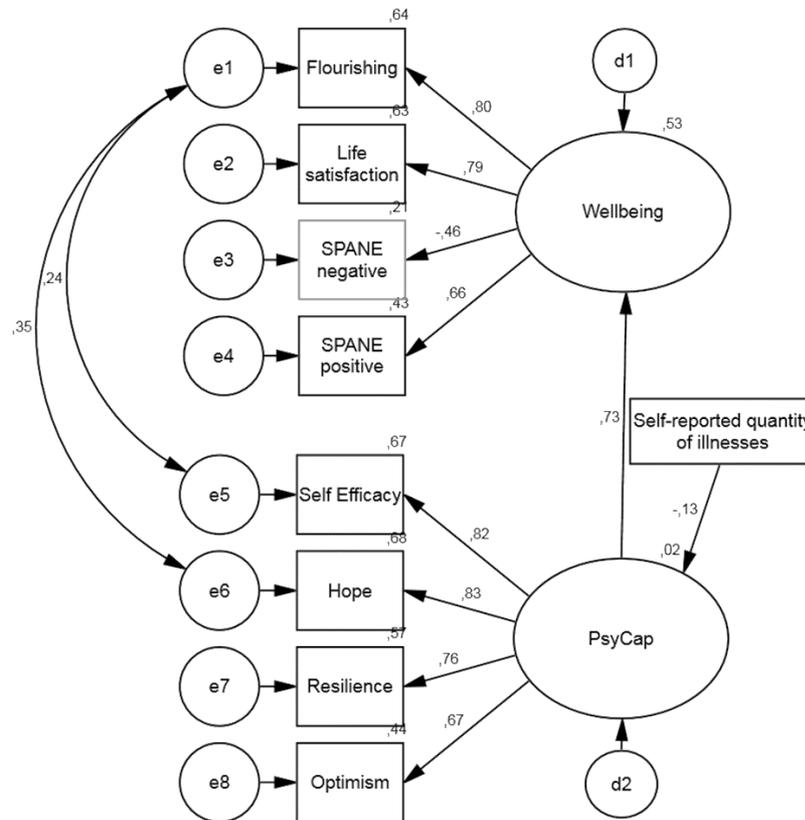
A significant regression equation was found ($F (4,153) = 30.459, p < 0.001$) with an $R^2 = 0.443$. The respondents' predicted flourishing was equal to $1.649 + 0.142$ (self-efficacy) $+ 0.387$ (hope) points. Both self-efficacy ($B = 0.142, p = 0.043$) and hope ($B = 0.387, p < 0.001$) contributed significantly to the model and were significant predictors of flourishing.

Next, as our research has not confirmed the assumption that any illness experience diminishes the psychological capital or psychological wellbeing of adolescents, we created a model on associations between the latent construct of psychological wellbeing, a latent construct of psychological capital, and the number of self-reported illnesses. As the data were distributed not normally, we conducted a square root transformation of right-skewed variables to create normally distributed variables. The standardized results of the model for the associations are presented in Figure 1.

To assess the model fit, the Comparative Fit Index (CFI), Normed Fit Index (NFI), Tucker-Lewis coefficient (TLI), and Root Mean Square Error of Approximation (RMSEA) were used. The findings revealed that the fit of the model was acceptable ($\chi^2 = 101.4728; DF=24; RMSEA=0.0649 [0.0522-0.0782]; CFI=0.9145; NFI=0.8973; TLI=0.8997; p=0.000$). The model indicates that a higher number of

self-reported illnesses (per person) predicts a weakening effect on psychological capital, while psychological capital predicts psychological wellbeing.

FIGURE 1. Standardized Results of The Model for The Associations Between The Self-Reported Illnesses, Psychological Capital, and Psychological Wellbeing in The Sample Of Adolescents



$\chi^2 = 101.4728$; $DF=24$; $RMSEA=0.0649$ [0.0522- 0.0782]; $CFI=0.9145$; $NFI=0.8933$; $TLI=0.8997$; $p=0.000$.

DISCUSSION

Nowadays, researchers focus on the effect of COVID-19 on health-related quality of life in adolescents and children [15]. The current study did not explore the impact of COVID-19 on adolescents’ subjective health and wellbeing but aimed to examine adolescents’ self – reported health and its associations with psychological wellbeing (flourishing, life satisfaction, positive and negative emotions) and psychological capital (self – efficacy, hope, resilience, and optimism) before the pandemic.

Based on the literature, we have chosen to investigate health – wellbeing associations in a sample of adolescents [16]. We assumed that any illness experience diminishes psychological wellbeing as psychological wellbeing is related to health [3,4,5,8,9].

Moreover, as psychological wellbeing relates to psychological capital, we presumed that illness experience also diminishes psychological capital of adolescents, and the quantity of illnesses (subjectively bad health) might contribute to reduced psychological capital and psychological wellbeing.

We analyzed differences in self-reported psychological flourishing, life satisfaction, negative emotions, positive emotions, psychological capital, self – efficacy, hope, resilience, and optimism when comparing the groups based on self-reported health as prior research has documented possible associations [9].

Unexpectedly, there were just some significant differences in scores of the study variables when we compared adolescent groups based on self-reported health, even though findings of other authors established many significant differences in adult population [4].

This research has indicated that adolescent respondents who reported absence of attention deficit hyperactivity disorder (ADHD) demonstrated significantly higher scores for optimism than those who reported ADHD. Even though some researchers have found that adults having ADHD are cognitively avoidant and, consequently, more optimistic than healthy individuals, the results are in line with some findings [18].

Furthermore, the study has indicated that adolescents who reported absence of learning difficulties demonstrated significantly lower scores for negative emotions and significantly higher scores for self-efficacy than those who reported learning difficulties, which was also in line with other authors [20].

Surprisingly, the research has demonstrated that adolescents who reported autism spectrum disorder demonstrated significantly higher scores for life satisfaction and resilience than those who reported the absence of autism spectrum disorder. Even though there are some discoveries concerning the quality of life of people having autism spectrum disorders [18], our findings need further investigation.

Unexpectedly, the research has indicated that adolescent respondents who reported experience of severe physical illness (cancer, cardiovascular) demonstrated significantly higher scores for positive emotions than those who reported the absence of severe physical illness (cancer, cardiovascular). Having in mind the findings of other researchers [17], these results need further investigation.

This research has also indicated that adolescent respondents who reported absence of other illness demonstrated significantly lower scores for negative emotions and significantly higher scores for flourishing than those who reported other illness which is in line with many authors [4,11].

However, this study has not confirmed the assumption that any illness experience diminishes the psychological wellbeing or psychological capital of adolescents. The model on associations between illnesses, psychological capital, and wellbeing indicates that a higher number of diseases (per person) predicts a weakening effect on psychological capital, while psychological capital predicts psychological wellbeing. The results obtained can be related to the previous theoretical knowledge and most research findings, which point to the existence of a relation between subjective health, psychological capital, and psychological wellbeing [11, 19].

Moreover, this study demonstrated some scores of psychological flourishing, life satisfaction, positive and negative emotions, psychological capital, self – efficacy, hope, resilience, and optimism in different subjective health groups of adolescents. The findings can be related to the previous theoretical findings and most research findings suggesting a relationship between specific dimensions of health, psychological capital and psychological wellbeing [8, 9, 11].

For the last decade, many authors have been contributing to solid theoretical foundations on health psychology. Our research has also contributed to research on flourishing, life satisfaction, positive and negative emotions, psychological capital, self – efficacy, hope, resilience, and optimism in different subjective health conditions. However, our research's contribution to health-related variables is exceptionally modest in comparison to the studies which analyzed the associations between health, psychological capital and psychological wellbeing [3,4,8,9,11].

Recently, many researchers have been focusing on health-related interventions [9,11,19]. We hope that this study reasonably contributed to the understanding of the association between self-reported health, psychological capital, and psychological wellbeing, and this might have an added value for health intervention planning. Furthermore, this research provided some empirical evidence to apply health-related PsyCap or similar interventions for adolescents as high self – efficacy, hope, and resilience proved to be related to the health of youth.

CONCLUSIONS

This paper presents some selected data of a broader survey on the wellbeing of Lithuanian adolescents. We considered that it is essential to investigate the relationship between psychological wellbeing, psychological capital, and illnesses because these variables and their associations in adolescence are under-researched. The purpose of this research was to compare psychological wellbeing (life satisfaction, flourishing, negative emotions, and positive emotions) and psychological capital (self – efficacy, hope, resilience, optimism) in groups of subjectively healthy and unhealthy adolescents. In this paper, we have analyzed the results of a simple random sample of gymnasium students. We assumed that self – reported illness is associated with diminished psychological wellbeing in adolescents who have suffered the illness in the past even though they are living an active life at present. This research indicated that adolescent respondents who reported the absence of attention deficit hyperactivity disorder demonstrated significantly higher scores for optimism than those who reported attention deficit hyperactivity disorder. The research demonstrated that adolescent respondents who reported absence of learning difficulties demonstrated significantly lower scores for negative emotions and significantly higher scores for self-efficacy than those who reported learning difficulties. Surprisingly, the research has demonstrated that adolescent respondents who reported autism spectrum disorder demonstrated significantly higher scores for life satisfaction and resilience than those who reported the absence of autism spectrum disorder. Unexpectedly, the research has indicated that adolescent respondents who reported experience of severe physical illness (cancer, cardiovascular) demonstrated significantly higher scores for positive emotions than those who reported the absence of severe physical illness (cancer, cardiovascular). Thus

our results need further investigation. The model on associations between illnesses, psychological capital, and wellbeing indicates that adolescents' subjective health predicts psychological capital which predicts psychological wellbeing.

LIMITATIONS AND FUTURE DIRECTIONS

The limitation of the current study consists of location because the study was conducted in Lithuania, and the results might reflect the specifics of this area. Furthermore, we have analyzed the results of the adolescents' sample, which was random, not a representative sample. It would be desirable to analyze a representative sample of adolescents and to compare the groups of adults and adolescents in the future.

Furthermore, it is essential to note that the self-reported illness experience reflects the subjective opinion, as the objective health status was not measured. It would be interesting to compare information on subjective and objective health status and evaluate psychological capital and wellbeing by objective health-illness groups. Moreover, based on the data obtained, it is possible to conclude only the existence of significant relationships among the examined variables. One of the implications for future research is creating an experimental or longitudinal design.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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