

Predrag Ž. Živković
University of Kragujevac
Faculty of Education in Jagodina
Department of Humanities and Social Sciences

УДК 659.3:37.011.3-057.875
DOI [10.46793/Uzdanica18.II.237Z](https://doi.org/10.46793/Uzdanica18.II.237Z)
Оригинални научни рад
Примљен: 3. септембар 2021.
Прихваћен: 12. новембар 2021.

STUDENT TEACHERS' SELF-HANDICAPPING AND SOCIAL MEDIA ADDICTION: RESILIENCE IN THE EDUCATION CRISIS¹

Abstract: The paper examines the connection between resilience, self-handicapping and social media addiction, as well as predictive and classification values of such a model with these three variables of interests in logistic regression analysis. The research sample consisted of 258 undergraduate and postgraduate students at the Faculty of Education in Jagodina. The following main results were obtained: the correlation between social media dependence and resilience is negative and higher than the correlation with self-handicapping, but in the regression model self-handicapping shows a better predictive value for the criterion variable of addiction than resilience. On the basis of self-handicapping, addiction to the influence of social media can be better predicted than on the basis of resilience. Self-handicapping is a better predictor of addiction to the influence of social networks than resilience. The obtained results can serve as recommendations for a broader and systematic consideration of the resilience of future teachers in the educational and media context in the conditions of crisis and new pandemic circumstances.

Keywords: self-handicapping, social media addiction, resilience, student teachers.

THEORETICAL BACKGROUND

Self-handicapping refers to undermining one's own achievements, usually for the purpose of managing impressions and in favor of the image of oneself (Kolditz, Arkin 1982). Self-handicapping, as a strategy for dealing with potential failure, appears when there is a threat to self-esteem, i.e. when failure is expected in an activity that is most often related to abilities. Then the person actively seeks or creates factors that hinder the performance of that activity, and which can serve

¹ The paper is the result of research within the bilateral project "Crisis, challenges and contemporary educational system" implemented by Faculty of Education, University of Kragujevac (Serbia) and Faculty of Philosophy, University of Montenegro (Montenegro) (2021–2023) and within the project of the Ministry of Education, Science and Technological Development of the Republic of Serbia (contract no. 451-03-9/2021-14/ 200140).

as a justification for potential failure. Based on a significant number of studies, a consensus has been established on the classification of self-handicapping strategies: behavioral self-handicapping (active creation of barriers that practically reduce the chances of success and disadvantage individuals before evaluation, e.g. use of psychoactive substances before exams) and proclaimed self-handicapping on barriers and conditions that individuals claim to have handicapped them in the prospects of success before evaluation, e.g. claims of pronounced social anxiety).

When individuals fear or expect to fail in tasks that are important to them, they often engage in practices and behaviors that can increase the likelihood of failure (or at least lower achievement) so that they have, in addition to lack of ability, an excuse for failure. This “self-shooting” can occur in any activity or domain. Academic self-handicapping has attracted a great deal of attention because academic achievement is reflected in an evaluative characteristic (represented as intelligence) and there are frequent opportunities for students to express their invisible abilities or shortcomings in a visible way. In other words, students often worry that they will look unintelligent if they are poorly tested on a test or task, so they sometimes engage in self-handicapped behavior that provides an excuse for poor results. To be labeled self-handicapped, behavior must have several characteristics. First, it must happen before an activity that provides an opportunity for bad achievements. Students who simply tell their friends that they did not take the exam after taking the exam provide an excuse for potentially poor grades; but if they were really preparing for the exam, they were not self-handicapped. Second, self-handicapping must be intentional.

Self-handicapping is a tendency similar to trait (Jones, Rhodewalt 1982). It is also situation-specific induced behavior (Tice 1991). Researchers who have described self-handicapping as a trait argue that some individuals are simply more prone to self-handicapping than others, and this propensity is present in a variety of situations. Sources for the development of such a trait may be biological (anxious personality), or may arise from childhood socialization experiences, such as a strong emphasis on the importance of omnipotence. Self-disability is also associated with a variety of stable characteristics that may contribute to self-disability behavior, such as low self-esteem, poor perception of control (locus of control), high self-awareness, and belief that intelligence is a fixed trait (Berglas 1985; Rhodewalt 1994; Knee, Zuckerman, 1998). Researchers who conceptualized self-handicapping as a behavior focused on environmental factors as sources of self-handicapping behavior. Students are more likely to self-handicapping in classrooms where competition is emphasized and where they try to outperform their peers (Urduan, Midgley, Anderman 1998; Midgley, Urduan 2001; Urduan 2004). When individuals are afraid of failure and fear that any lack of success may indicate a general lack of ability, self-handicap is more likely to occur. Perhaps the strongest experiential predictor of self-handicapping is a history of low achievement.

Individuals who show failure may in the future develop an expectation of low achievement on similar tasks, especially if they believe that failure is caused by stable and uncontrolled causes, such as lack of ability. Once individuals develop a belief that they may not succeed in an upcoming task, they are more likely to engage in self-handicapped behavior. The cycle of failure → self-handicapping → failure can result in a gradual withdrawal of effort in college (or any domain), leading to complete withdrawal from activities (Zuckerman, Kieffer, Knee 1998; Urdan, Midgley 2003).

Research examining the relationship between motivation and self-control has found that certain motivational characteristics of students and teaching practices are associated with self-handicapped behavior. When students are concerned that they may be doing worse than their peers (although they are not assessed as academically incompetent), they are more likely to self-handicapping (Kaplan, Middleton, Urdan, Midgley 2002; Urdan 2004). These concerns, known as achievement avoidance goals, can be influenced by teacher's behavior. Teachers who emphasize social comparison and competitiveness in the classroom and publicly present reports on student achievement (test scores, grades) can promote the adoption of performance avoidance goals in the classroom (Anderman, Anderman 1999). In contrast, Turner and associates found that in classrooms where teachers explicitly support student autonomy and intrinsic motivation, performance avoidance and self-handicapping goals are reduced (Turner, Meier, Midgley, Patrick 2003).

Self-handicapped behavior is associated with lower achievement. Since self-handicapping behavior represents a reduction or withdrawal of effort toward a given task (non-preparation for a test), it is not surprising that the tendency to self-handicap is associated with less impact on those tasks. But there may be some benefits to self-handicapping. Some research studies show that self-handicapped people feel better about themselves after failure than students who do not self-handicap (Drekler, Ahrens, The Hague 1995; Feick, Rhodeval, 1997). There seems to be some ego-protective function of self-control in situations of failure. In addition, they may be useful to students who are able to succeed despite self-handicapping (Feick, Rhodeval, 1997). Tice (1991) found that students with low self-esteem were more likely to be handicapped when they feared they would fail a task, while students with high self-esteem were likely to be handicapped when they believed they had the opportunity to stand out as exceptional. Students who succeed even after self-handicapping report a temporary increase in self-esteem.

In addition, studies show that self-disability is successful in helping individuals divert the assessments of others from the attribution of weak abilities to failure. Because self-handicapping behavior undermines achievement and can lead to long-term withdrawal from activities (such as school and college), it is important that parents and teachers discourage self-handicapping and avoid behavior that may encourage it. Dveck and her associates (Dveck et al. 1999) have long argued that teachers and parents should promote the view of intelligence as a variable charac-

teristic, something that can be improved by effort. They suggest that teachers more often praise students for using the right strategies, rather than simply telling them how smart they are, as they could encourage them to think of abilities as immutable and fixed traits that contribute to self-handicapping.

We have an advanced amount of information at our fingertips due to advancing technologies that allow us to have personal computers in our pockets. Our reliance on technology and social networking sites has grown over the years – many co-addicts, especially from social media (Koc, Guliaci 2013). People have become so attached to their phones that 79% of smartphone owners have contact with them for an average of two hours a day. According to some data, within 15 minutes of waking up in the morning, almost 80% of people check their phones (IDC 2013). The use of social media has changed the way we look at professional roles, politics and the way people connect and communicate around the world. For more than a decade, researchers have been interested in measuring the use of social networking sites and platforms. In 2005, the specialized Pew Research Center began monitoring the use of social media by analyzing the results of surveys of a large sample of adult Internet users. At that time, 58% of adult respondents used social networks.

Today, 69% of younger and older adults use some type of social media to make social connections (Greenwood, Perrin, Duggan 2016; Pew Research Center 2017). Several studies have considered the clinical implications of using social media with diverse outcomes. For example, Ellison and associates (Ellison et al. 2007) examined the link between the use of the Facebook platform and social capital collected through someone's real or virtual relationship networks. They discovered a strong connection between the use of Facebook and the self-perception of realized social relations and connections as social capital. Surprisingly, in related studies in which the authors analyzed the use of sites / platforms for social networking and the perception of self-reported social capital, those individuals who consumed more Internet content reported poorer quality of social capital and a strong sense of loneliness (Burke et al. 2010). The results of a research study (Ellison et al. 2007) showed that Facebook can have a positive impact on self-esteem and life satisfaction. Significant correlations were obtained between high self-esteem, life satisfaction and the use of Facebook as a capital for social attachment, although the predictive value of the latter has not been determined.

Participants who reported high life satisfaction and self-esteem showed small differences in relation to the self-perception of realized social capital using social networking platforms. Moreover, in Vogel and associates' research (Vogel, Ross, Roberts, Eckels 2014), the influence of social media and social networks on self-esteem was determined. The researchers measured the frequency of use of social platforms, self-esteem and the degree to which participants focused on people who were better or worse than they were in the horizontal-vertical structure of social relations (comparison up and down). Those who used social media and social networks more often had lower self-esteem more often than others.

Having all this in mind, we can formulate the goal of our research: to determine the connection between resilience, self-handicapping and addiction to the influence of social media of students at the Faculty of Education in Jagodina.

METHOD

On a sample of 258 undergraduate and postgraduate students of the Faculty of Education in Jagodina ($N = 258$, $M = 142.76$, $SD = 14.741$), we examined the connection between resilience, self-handicapping and social media addiction, as well as predictive and the classification values of such a model with these three variables of interests in logistic regression analysis.

We started from three main assumptions: that there is a correlation between respondents' assessments for three variables of interest (H1), that based on self-handicapping and resilience, social media addiction can be predicted (H2), and that a model with good classification values for three variables of interest can be achieved (H3).

In the research, three scales were used to measure the attitudes of the respondents:

- *Self-handicapping Scale* (Rhodewalt, Jones 1982), on our sample of respondents ($N = 284$). Cronbach's alpha reliability coefficient is $\alpha = 0.784$.
- *BSMA Scale (Bergen Social Media Addiction Scale)* (Andreassen et al. 2016) (Addiction to Social Media Influence Scale), on our sample of respondents ($N = 284$). Cronbach's alpha reliability coefficient $\alpha = 0.485$. The lower Cronbach's alpha coefficient may be the result of a relatively small number of items ($n = 6$). Parallel analysis (Monte Carlo CFA), as well as factor analysis, indicates the existence of two factors. We decided to measure one addition factor with one score.
- *The Resilience Scale* (RS 25, Wagnild, Young 1993) is the 25-items questionnaire designed to identify the degree (level of expression) of individual resilience. It has shown satisfactory values of reliability and validity in measuring resilience (Ahern 2006). Checking the content and concurrent validity showed that resilience measured by this scale positively correlates with life satisfaction, self-esteem, self-actualization, stress management and social support, and negatively with depressive symptoms and anxiety (Wagnild, Young 1993; Heilemann, Lee, Kury 2003; Humphreys 2003; Wagnild 2009; Nishi et al. 2010; Abiola, Udofia 2011). Internal consistency has been shown in numerous studies (in ranging from $\alpha = .76$ to $\alpha = .91$) (Ahern 2008). In our research, we obtain Cronbach's alpha reliability coefficient $\alpha = .83$.

Data obtained on three scales by which we measured resilience, self-handicapping and social media addiction were processed in the statistical package SPSS 17.0. To determine the predictive and classification characteristics and values of the proposed model, the Smart PLS 3.3.3 package was used.

RESULTS

We will present the results of a cross-sectional study of a simple correlation design. Correlation analysis shows, and this is the unique conclusion of the study, high correlations of measured variables: self-handicapping, resilience and addiction to social media networks.

Table 1. Results of correlation analysis: social media addiction, self-handicapping and resilience

	BMSC	Self-Handicapping	Resilience
BMSC	1.000		
Self-Handicapping	.243*	1.000	
Resilience	-.412**	-.465*	1.000

Legend: BMSC: Bergen Social Media Addiction Scale

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Statistically significant correlations of scores on the scales of resilience, self-handicapping and addiction to social media were obtained. As expected, a negative correlation was obtained between self-handicapping and resilience ($r = -0.465$), as well as resilience and addiction to social media ($r = -0.412$). The more pronounced the self-handicapping, the weaker the resilience and the more pronounced the addiction to social media networks. In the standard multiple regression procedure, we first tested the distribution of results and the nature of the associated relationship between the variables. We checked these assumptions on the residual scattering diagram (differences between the obtained and the value of the dependent variable addition to social networks). There are no significant deviations from the normal distribution.

In the procedure of standard multiple regression, we also determined the coefficients of determination which show how much a part of the variance of the dependent variable (addiction to social networks) explains the model (includes variables self-handicapping and resilience). In this case, $r^2 = 0.464$ means that our model explains 46.4% of the variance of addiction to social networks. Since r^2 is too optimistic estimate of the actual value of the coefficient of determination, especially for small samples, we will use the corrected value (Adjusted R Square)

for interpretation. To evaluate the statistical significance of this indicator, in the ANOVA test (results of the null hypothesis that $r^2 = 0$), we obtained that the model in this example reaches statistical significance (Sig. = .001; $p \leq 0.05$). Resilience, in the verification of standardized β coefficients, has a higher beta coefficient ($\beta = -.419$) than self-handicapping ($\beta = -.338$), which means that this variable individually contributes the most to the explanation of the dependent variable (addiction to social networks).

Results of calculation from Smart PLS. The first parts of the results are data related to the measurement of the reflective constructs in the model. For this type of measurement Hair et al. (2019) suggest analyzing reflective indicator loadings, internal consistency reliability, convergent validity, and discriminant validity. The first table presents the results for reflective factor loadings. In the first step, some variables did not pass this test, since their loadings were below 0.708, and they were extracted from the later analysis. In the second step, we keep all factors with loadings higher than the thresholds of 0.708 (which is the minimum according to Hair et al. 2019).

Table 2. Indicator reliability and construct reliability and validity

	Cronbach's Alpha	Rho_A	Composite Reliability	AVE
Resilience	0.853	0.842	0.888	0.570
Self-Handicapping	0.712	0.803	0.737	0.586
Social Media Adiction	0.764	0.799	0.749	0.511

*AVE – Average Variance Extracted

Table 2 also presents internal consistency reliability and convergent validity, measured by Cronbach's Alpha, Composite Reliability, and average variance extracted (AVE). According to the data, internal consistency and convergent validity are satisfied for all three reflective constructs (Cronbach's Alpha between 0.70–0.90, max 0.95; Composite reliability between 0.70 and 0.95; $AVE \geq 0.50$). In the case of discriminant validity, Fornell–Larcker criterion was performed as well as Heterotrait–Monotrait Ratio (HTMT). Discriminant validity means that each construct captures a unique phenomenon not represented by any other construct in the model (Hair et al. 2017). In both tests, all constructs reached suggested thresholds ($HTMT < 0.90$), from Table 2.

The multicollinearity analysis showed that all variance inflator factors did not surpass the value of 5, which points to the colinearity issues (Hair et al. 2019). The final part of the analysis was to explore the relations between all dimensions. The data from Table 4 and Figure 1 show coefficients for PLS-SEM relations and their significance level.

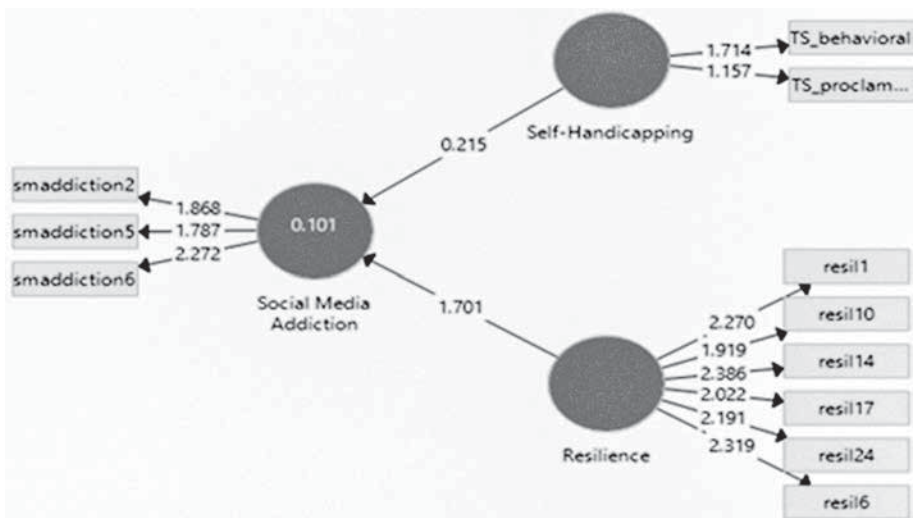
Table 3. Discriminant Validity – Fornell–Larcker Criterion and Heterotrait–Monotrait Ratio (HTMT)

Fornell–Larcker Criterion			
	Resilience	Self-Handicapping	Social Media Adiction
Resilience	0.755		
Self-Handicapping	0.013	0.766	
Social Media Adiction	-0.313	0.052	0.707
Heterotrait–Monotrait Ratio (HTMT)			
	Resilience	Self-Handicapping	Social Media Adiction
Resilience			
Self-Handicapping	0.157		
Social Media Adiction	0.395	0.285	

Table 4. Mean, STDEV, T-Values, P-Values.

	Orig. Sample	Sample Mean	SD	T-Statistics	P-Values
RES ≥ SMA	-0.314	-0.356	0.184	2.701	0.034
SHEND ≥ SMA	0.560	0.590	0.259	2.035	0.041

Figure 1. The path model with bootstrapping results



The previous calculation procedure of the PLS algorithm was performed, during which all items that had saturation values less than 0.70 for this model with three latent reflective variables were removed. After that, we checked the significance of the obtained connections in the bootstrapping procedure. Although we expected better indicators of significance in the bootstrapping procedure for the model obtained in this way, and based on the procedure of calculating the PLS algorithm, this unfortunately did not happen. This result indicates the need to re-examine the elements of an acceptable model on a larger sample of respondents.

DISCUSSION

Sriwilai and Charoensukmongkol (2015) concluded that the coping strategy with a focus on emotions was more used by people addicted to social media. Social media addiction was not significantly associated with resilience at all, although higher addiction was associated with a lower degree of determination. McNicol and Thorstensson (2017) defined Internet addiction as an excessive preoccupation, and explained this by the instincts to use the Internet which consequently cause malfunctions. They concluded that internet addiction, which involved the use of social media, could be linked to coping strategies. Mental exclusion occurs if we engage in activities such as daydreaming, sleeping, or any other attempt by someone to use distraction to escape stressors (Carver et al. 1989). In the case of the mentioned study, mental relief includes the use of social media. With the prevalence of social media use, it is not surprising that participants who reported greater dependence on social media used mental exclusion in response to stressors.

Hou and associates (Hou et al. 2017) also linked the problematic use of social media with escape from stress. Although it is unclear whether the use of social media causes avoidance of confrontation or avoidance of confrontation causes abuse of social media, it is clear that the use of social media is a method of avoiding confrontation. A study by Vogel and associates (Vogel et al. 2014) found that people who use the Facebook platform were more likely to rate themselves negatively than those who were less likely to report using Facebook. In addition, Facebook users have engaged in more social comparisons (comparing themselves to others they believe are better than him/her) than lower social comparisons (comparing themselves to others who are perceived as inferior).

Given the findings in this study, it can be assumed that those who are more resistant spend less time comparing themselves. In our study, statistically significant correlations of addiction on the influence of social media with self-handicapping ($r = 0.24$) and resilience ($r = -0.41$) were obtained. The correlation between addiction and resilience is negative and higher than the correlation with self-handicapping, but in the regression model, self-handicapping shows a better predictive value for the criterion variable of addiction than resilience. Individuals who are

resilient have less potential for addiction to the influence of social media (which we assumed), but based on self-handicap, addiction to the influence of social media can be better predicted than can be predicted based on resilience.

CONCLUSION

Indicators of the association of psychological variables of interest, as well as their psychological correlates, indicate several interesting relationships we obtained in the study: negative association of self-handicap and resilience (proclaimed self-handicap and resilience negatively correlate, as well as stress with resilience); statistically significant correlation of self-esteem with addiction to social media influence and resilience, but not with self-handicapping; statistically significant correlation of addiction to the influence of social media with self-handicapping and resilience; statistically significant correlation of resilience and welfare assessment, but the obtained correlation of welfare assessment with self-handicapping and addiction to the influence of social media are not statistically significant. The correlation between addiction and resilience is negative and higher than the correlation with self-handicapping, but in the regression model, self-handicapping shows a better predictive value for the criterion variable of addiction than resilience.

Individuals who are resilient have less potential for addiction to the influence of social media, which we assumed, but on the basis of self-handicap it is better to predict addiction to the influence of social media than it can be assumed on the basis of resilience. Self-handicapping is a better predictor of addiction to the influence of social networks than resilience. The results of the research could imply the need to focus teacher professional education programs on supporting and strengthening student resilience. In future research, it is necessary to understand and examine the role of the program and the teachers themselves in the dynamics of resilience. University programs, mentoring, induction and in-service training for new teachers are desirable to deal with the concept of resilience as part of compulsory but also hidden curricula. Finally, this research is based on correlation data, which means that it is difficult to discern the essential nature of these relationships. Future research should use research approaches (paradigms and research designs) that determine the cause of these relationships. Replication is necessary to confirm the results and data from this study.

REFERENCES

Abiola, Udofia (2011): T. Abiola, O. Udofia, Psychometric assessment of the Wag-nild and Young's resilience scale in Kano, Nigeria, *BMC Research Notes*, 4, 509.

Ahern, Kiehl, Sole, Byers (2006): N. R. Ahern, E. M. Kiehl, M. L. Sole, J. Byers, A review of instruments measuring resilience, *Issues in Comprehensive Pediatric Nursing*, 29, 103–125.

Aroian, Norris (2000): K. J. Aroian, A. E. Norris, Resilience, stress, and depression among Russian immigrants to Israel, *Western Journal of Nursing Research*, 22, 54–67.

Aroian, Schappler-Morris, Neary, Spitzer, Tran (1997): K. J. Aroian, N. Schappler-Morris, S. Neary, A. Spitzer, T. V. Tran, Psychometric evaluation of the Russian Language Version of the Resilience Scale, *Journal of Nursing Measurement*, 5, 151–164.

Beutel, Tibubos, Klein, Schmutzer, Reiner, Kocalevent, Braehler (2017): M. E. Beutel, A. A. Tibubos, E. M. Klein, G. Schmutzer, I. Reiner, R. D. Kocalevent, E. Braehler, Childhood adversities and distress – the role of resilience in a representative sample, *PLoS One*, 12(3), 1–14.

Becoña (2006): E. Becoña, Resiliencia: definición, características y utilidad del concepto, *Revista de Psicopatología y Psicología Clínica*, 11, 125–146.

Beltman, Mansfield, Price (2011): S. Beltman, C. Mansfield, A. Price, Thriving not just surviving: A review of research on teacher resilience, *Educational Research Review*, 6, 185–207.

Brunetti (2006): G. Brunetti, Resilience under Fire: Perspectives on the Work of Experienced, Inner City High School Teachers in the United States, *Teaching & Teacher Education: An International Journal of Research and Studies*, 22 (7), 812–825.

Burgund (2016): A. Burgund, *Uticaj ličnih i sredinskih faktora na mlade u procesu pripreme za napuštanje alternativnog staranja* (neobjavljena doktorska disertacija), Beograd: Fakultet političkih nauka Univerziteta u Beogradu.

Castro, Kelly, Shih (2010): A. Castro, J. Kelly, M. Shih, Resilience strategies for new teachers in high-needs areas, *Teaching and Teacher Education*, 26, 622–629.

Cefai (2007): C. Cefai, Resilience for all: A study of classrooms as protective contexts, *Emotional and Behavioural Difficulties*, 12(2), 119–134.

Cicchetti, Rogosch (1997): D. Cicchetti, F. A. Rogosch, The role of self-organization in the promotion of resilience in maltreated children, *Development and Psychopathology*, 9(4), 799–817.

Compas, Connor-Smith, Saltzman, Harding Thomson, Wadsworth (2001): B. E. Compas, J. K. Connor-Smith, H. Saltzman, A. Harding Thomson, M. E. Wadsworth, Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research, *Psychological Bulletin*, 127(1), 87–127

Cui, Teng, Li, Oei (2010): L. Cui, X. Teng, X. Li, T. Oei, The Factor Structure and Psychometric Properties of the Resiliency Scale in Chinese Undergraduates, *European Journal of Psychological Assessment*, 26, 162–171.

Earvolino-Ramirez (2007): M. Earvolino-Ramirez, Resilience: A concept analysis, *Nursing Forum*, 42, 73–82.

EuroQol Group (1990): EuroQol: A new facility for the measurement of health-related quality of life, *Health Policy*, 16(3), 199–208.

Egeland, Carlson, Sroufe (1993): B. Egeland, E. Carlson, L. A. Sroufe, Resilience as process, *Development and Psychopathology*, 5, 517–528.

Fletcher, Sarkar (2013): D. Fletcher, M. Sarkar, Psychological resilience: A review and critique of definitions, concepts and theory, *European Psychologist*.

Freedman, Appleman (2008): S. W. Freedman, D. Appleman, “What else would I be doing?”: Teacher identity and teacher retention in urban schools, *Teacher Education Quarterly*, 35(3), 109–126.

Fisherman, Abbot (1998): S. Fisherman, J. A. Abbot, *Ego Identity as a Predictor of Teaching Success*, paper presented at the Annual Meeting A.E.R.A. San Diego.

Glantz, Sloboda (1999): M. D. Glantz, Z. Sloboda, Analysis and reconceptualization of resilience, In: M. D. Glantz, J. L. Johnson (Eds.), *Resilience and development: Positive life adaptations*, New York: Kluwer Academic/Plenum, 109–128.

Gloria, Steinhardt (2016): C. T. Gloria, M. A. Steinhardt, Relationships among positive emotions, coping, resilience and mental health, *Stress and Health*, 32, 145–156.

González Arratia (2011): L. F. N. I. González Arratia, *Resiliencia y Personalidad en niños y adolescentes. Cómo desarrollarse en tiempos de crisis*, Universidad Autónoma del Estado de México.

Goldstein, Brooks (2007): S. Goldstein, R. B. Brooks, Understanding and Managing Children's Classroom Behavior: Creating Sustainable, Resilient Classrooms (Vol. 207), New York: John Wiley & Sons.

Grant, Guille, Sen (2013): F. Grant, C. Guille, S. Sen, Well-being and the risk of depression under stress, *Plos One*, 8(7), 1–6.

Greenfield (2015): B. Greenfield, How Can Teacher Resilience Be Protected and Promoted?, *Educational and Child Psychology*, 32, 51–68.

Gu, Day (2007): Q. Gu, C. Day, Teachers resilience: A necessary condition for effectiveness, *Teaching and Teacher Education*, 23, 1302–1316.

Gu, Day (2013): Q. Gu, C. Day, Challenges to teacher resilience: conditions count, *British Educational Research Journal*, 39(1), 22–44.

Heilemann, Lee, Kury (2003): M. V. Heilemann, K. Lee, F. S. Kury, Psychometric properties of the Spanish version of the Resilience Scale, *Journal of Nursing Measurement*, 11, 61–72

Hou, Wang, Guo, Gaskin, Rost, Wang (2017): X. Hou, H. Wang, C. Guo, J. Gaskin, D. H. Rost, J. Wang, Psychological resilience can help combat the effect of stress on problematic social networking site usage, *Personality and Individual Difference*, 109, 61–66.

Howard, Johnson (2004): S. Howard, B. Johnson, Resilient Teachers: Resisting Stress and Burnout, *Social Psychology of Education*, 7, 399–420.

Humphreys (2003): J. Humphreys, Resilience in sheltered battered women, *Issues in Mental Health Nursing*, 24, 137–152.

Keyes, Dhinga, Simoes (2010): C. L. M. Keyes, S. S. Dhinga, E. J. Simoes, Change in level of positive mental health as a predictor of future risk of mental illness, *Mental Health Promotion and Protection*, 100(12), 2366–2371.

Kolar (2011): K. Kolar, Resilience: Revisiting the Concept and its Utility for Social Research, *International Journal Mental Health Addiction*, 9, 421–433.

Lazarus, Folkman (1984): R. S. Lazarus, S. Folkman, *Stress, appraisal, and coping*, New York: Springer.

Lazarus, Folkman (1987): R. S. Lazarus, S. Folkman, Transactional theory and research on emotions and coping, *European Journal of Personality*, 1, 141–169.

Le Cornu (2009): R. Le Cornu, Building Resilience in Pre-Service Teachers, *Teaching and Teacher Education*, 25, 717–723.

Luthar (2006): S. Luthar, Resilience in development: A synthesis of research across five decades, In: D. Cicchetti, D. J. Cohen (Eds.), *Developmental Psychopathology: Risk, Disorder, and Adaptation*, New York: Wiley, 740–795.

Lundman, Strandberg, Eisemann, Gustafson, Brulin (2007): B. Lundman, G. Strandberg, M. Eisemann, Y. Gustafson, C. Brulin, Psychometric properties of the Swedish version of the Resilience Scale, *Scandinavian Journal of Caring Sciences*, 21, 229–237.

Luthar, Cicchetti, Becker (2000): S. S. Luthar, D. Cicchetti, B. Becker, The construct of resilience: A critical evaluation and guidelines for future work, *Child Development*, 71, 543–562.

Mak, Ng, Wong (2011): W. W. S. Mak, I. S. W. Ng, C. C. Y. Wong, Resilience: Enhancing well-being through the positive cognitive triad, *Journal of Counseling Psychology*, 58, 610–617.

Masten (2001): A. S. Masten, Ordinary magic: Resilience processes in development, *The American Psychologist*, 56, 227–238.

Maslach, Jackson, Leiter (1996): C. Maslach, S. E. Jackson, M. P. Leiter, *Maslach Burnout Inventory* (3rd ed.), Paolo Alto, CA: Consulting Psychologists Press.

McNkol, Tborsteinsson (2017): M. L. McNkol, E. B. Tborsteinsson, Internet addiction, psychological distress, and coping responses among adolescents and adults, *Cyberpsychology, Behavior, and Social Networking*, 20(5), 296–304

Nishi, Uehara, Kondo, Matsuoka (2010): D. Nishi, R. Uehara, M. Kondo, Y. Matsuoka, Reliability and validity of the Japanese version of the Resilience Scale and its short version, *BMC Research Notes*, 3, 310.

Nygren, Aléx, Jonsén, Gustafson, Norberg, Lundman (2005): B. Nygren, L. Aléx, E. Jonsén, Y. Gustafson, A. Norberg, B. Lundman, Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old, *Aging & Mental Health*, 9, 354–362.

Olsson, Bond, Burns, Vella-Broderick, Sawyer (2003): C. Olsson, L. Bond, J. M. Burns, D. A. Vella-Broderick, S. M. Sawyer, Adolescent resilience: A concept analysis, *Journal of Adolescence*, 26, 1–11.

Peng (1994): S. S. Peng, Understanding resilient students: The use of national longitudinal databases, In: M. C. Wang, E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects*, 73–84.

Piña López (2015): J. Piña López, A critical analysis of the concept of resilience in psychology, *Anales De Psicología / Annals Of Psychology*, 31(3), 751–758.

Rhodewalt, Jones (1982): F. Rhodewalt, E. E. Jones, *The Self-Handicapping Scale*, Princeton University: Department of Psychology.

Richardson (2002): G. E. Richardson, The Metatheory of resilience and resiliency, *Journal of Clinical Psychology*, 58, 307–321.

Rosenberg (1965): M. Rosenberg, *Society and the adolescent self-image*, Princeton, NJ: Princeton University Press.

Rirkin, Hoopman (1991): M. Rirkin, M. Hoopman, *Moving beyond Risk to Resiliency*, Minneapolis, MN: Minneapolis Public School.

Sammons, Mujtaba, Earl, Gu (2007): P. Sammons, T. Mujtaba, L. Earl, Q. Gu, Participation in networked learning community programmes and standards of pupil achievement: does it make a difference?, *School Leadership and Management*, 27(3), 213–238.

Shah (2011): M. Shah, The Dimensionality of Teacher Collegiality and the Development of Teacher Collegiality Scale, Makrothink Institute – *International Journal of Education*, 3(2), 1–20.

Southwick, Bonanno, Masten, Panter-Brick, Yehuda (2014): S. M. Southwick, G. A. Bonanno, A. S. Masten, C. Panter-Brick, R. Yehuda, Resilience definitions, theory, and challenges: Interdisciplinary perspectives, *European Journal of Psychotraumatology*, 5, 253–338.

Stanford (2001): B. H. Stanford, Reflections of resilient, persevering urban teachers, *Teacher Education Quarterly*, 28(3), 75–87.

Sriwilai, Charoensukmongkol (2015): K. Sriwilai, P. Charoensukmongkol, Face it, don't Facebook it: Impacts of social media addiction on mindfulness, coping strategies, and the consequence of emotional exhaustion, *Stress and Health*, 32, 427–434.

Tait (2008): M. Tait, Resilience as a contributor to novice teacher success, commitment, and retention, *Teacher Education Quarterly*, 35(4), 57–75.

Trompetter, De Klein, Bohlmeijer (2017): H. R. Trompetter, E. De Klein, E. T. Bohlmeijer, Why does positive mental health buffer against psychopathology? An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy, *Cognitive Therapy and Research*, 41, 459–468.

Todorović (2005): J. Todorović, Porodični činioci stabilnosti samopoštovanja adolescenata [Family Factors of Self-esteem Stability in Adolescence], *Zbornik Instituta za pedagoška istraživanja [Journal of the Institute for Educational Research]*, 37 (1), 88–106.

Tuckman (1991): B. W. Tuckman, The Development and Concurrent Validity of the Procrastination Scale, *Educational and Psychological Measurement*, 51(2), 473–480.

Tugade, Fredrickson (2004): M. M. Tugade, B. L. Fredrickson, L. F. Barrett, Psychological resilience and positive emotional granularity, *Journal of Personality*, 72, 1161–1190.

Tugade, Fredrickson (2004): M. M. Tugade, B. L. Fredrickson, Resilient individuals use positive emotions to bounce back from negative emotional experiences, *Journal of Personality and Social Psychology*, 86, 320–333.

Ungar (2008): M. Ungar, Resilience across Cultures, *The British Journal of Social Work*, 38(2), 218–235.

Vinaccia, Quiceno, Moreno-San Pedro (2007): S. Vinaccia, J. M. Quiceno, E. Moreno-San Pedro, Resiliencia en adolescentes, *Revista Colombiana de Psicología*, 16, 139–146.

Vogel, Rose, Roberts, Eckles (2014): E. A. Vogel, J. P. Rose, L. R. Roberts, K. Eckles, Social comparison, social media, and self-esteem, *Psychology of Popular Media Culture*, 3(4), 206–222.

Wagnild (2003): G. M. Wagnild, Resilience and successful aging: Comparison among low and high income older adults, *Journal of Gerontological Nursing*, 29, 42–49.

Wagnild (2009): G. Wagnild, A Review of the Resilience Scale, *Journal of Nursing Measurement*, 17, 105–113.

Wagnild, Young (1993): G. M. Wagnild, H. M. Young, Development and psychometric evaluation of the Resilience Scale, *Journal of Nursing Measurement*, 1(2), 165–178.

Williams (2003): J. S. Williams, Why Great Teacher Stay [Commentary], *Educational Leadership*, 60, 71–75.

Živković, Stojanović, Ristanović (2018): P. Živković, B. Stojanović, D. Ristanović, Student Teachers Professional Identity: A Research in the Republic of Serbia, *The New Educational Review*, 51, 220–231.

Предраг Ж. Живковић

Универзитет у Крагујевцу

Факултет педагошких наука у Јагодини

Катедра за друштвено-хуманистичке науке

САМОХЕНДИКЕПИРАЊЕ И ЗАВИСНОСТ ОД ДРУШТВЕНИХ МЕДИЈА СТУДЕНАТА БУДУЋИХ УЧИТЕЉА: РЕЗИЛИЈЕНТНОСТ У УСЛОВИМА КРИЗЕ У ОБРАЗОВАЊУ

Резиме: На узорку од 258 студената преддипломског и последипломског нивоа Факултета педагошких наука у Јагодини, испитивана је израженост различитих аспеката резилијентности будућих учитеља, као и њихов међуоднос са самохендикепирањем у контактима на порталима и сервисима друштвених медија у условима ванредног стања. Добијени су следећи главни резултати: корелација зависности од друштвених медија и резилијентности је негативна и виша од корелације са самохендикепирањем, али у регресионом моделу самохендикепирање показује бољу предиктивну вредност за критеријумску варијаблу адикције од резилијентности. Појединци који су резилијентни мањег су потенцијала за адикцију на утицај друштвених медија, али се на основу самохендикепирања може боље предвидети зависност од утицаја друштвених медија него што се то може учинити на основу резилијентности. Самохендикепирање је бољи предиктор зависности на утицај друштвених мрежа од резилијентности. Добијени резултати могу послужити као препоруке за шире и систематско сагледавање резилијентности будућих учитеља у образовном и медијском контексту.

Кључне речи: самохендикепирање, зависност од друштвених медија, резилијентност, будући учитељи.