



Self-Handicapping as a Coping Strategy: Approaches to Conceptualization

Dina Nosenko, MA

Ph.D. student, Department of General and Medical Psychology,
Oles Honchar Dnipropetrovsk National University,
Dnipropetrovsk, Ukraine

Irina Arshava, Dr., Prof.

Chairperson of the Department of General and Medical Psychology,
Oles Honchar Dnipropetrovsk National University,
Dnipropetrovsk, Ukraine

Eleonora Nosenko, Dr., Prof.

Chairperson of the Department of Educational and Developmental Psychology,
Oles Honchar Dnipropetrovsk National University,
Dnipropetrovsk, Ukraine

ABSTRACT

New conceptualization of self-handicapping behavior as a non constructive proactive coping strategy is offered. Using correlation and factor analysis it was found out that low level of neuroticism, belief in self-efficacy, high level of self-esteem, subjective well-being and mental health continuum act as predictors of personal determination of the choice of constructive proactive coping behavior. Vice versa, high level of neuroticism, uncertainty in self-efficacy and low level of subjective well-being are found to be predictors of self-handicapping behavior as non-constructive proactive coping. Research results also suggest that enduring personality traits contribute to specific proactive coping styles and overall adaptation to stress.

Key words: Proactive coping behavior: constructive and non-constructive, proactive coping, preventive coping, anticipatory coping, self-handicapping.

INTRODUCTION

The problem of coping with stress attracted attention of researchers in early 60s [0], [0]. The existing research has mostly examined coping strategies that occur in response to certain complications at present time, namely: task-oriented, emotion-oriented, and avoidance-oriented coping [0], [0]. It has been determined that task-oriented coping negatively predicts distress [0], and is associated with positive striving emotions and goals [0], whereas emotion-oriented coping styles positively predict emotional distress [0]. Recently, attention has been focused on the proactive coping, which is oriented towards future and consists of efforts to accumulate resources that facilitate promotion of challenging goals and personal growth [0]. When it comes to proactive coping, until recently mainly constructive strategies have been coined: 1) proactive; 2) reflective; 3) strategic planning; 4) preventive; 5) instrumental support seeking; and 6) emotional support seeking [0], [0]. These strategies are manifested in seeing difficult situations as challenges, initiating constructive path of action, creating opportunities for growth and accumulating resources for coping [0]. However, the proactive process of anticipating potential stressors or challenges can have different levels of worry. For example, preventive coping is characterized by high worry levels, whereas proactive coping is not [0]. At

the same time, the phenomenon of self-handicapping has been interpreted as “imposing an obstacle to one’s successful performance in a particular situation in order to provide an excuse for failure (usually in a person of low self-esteem)” [0, p.682]. According to Berglas, self-handicapping behavior is proactively initiated to prevent from the loss of a valued resource [0]. Thus, this research objective was to theoretically conceptualize and empirically examine the possibility of interpreting self-handicapping behavior as a form of non constructive proactive coping. We attributed “non constructive” label to self-handicapping in order to differentiate between positive gains associated with “constructive” coping behavior versus “non constructive” consequences of self-handicapping behavior discussed further.

LITERATURE REVIEW

The phenomenon of self-handicapping was defined by Jones and Berglas as a strategy of proactively arranging for failure in particular situations in order to protect one’s image of competence [1]. Self-handicapping is conscious and volitional behavior, critically different from defense mechanisms [0]. Arkin and Oleson have concluded that people that do not use self-handicapping strategies tend to be persuaded by self-handicapping, and those, who are self-handicappers themselves, are able to recognize this behavior [0]. However, the situation with defense mechanisms is completely the opposite: the ones, who do not use defense mechanisms, are able to see through them, whereas those who use defense mechanisms are not able to recognize them in behavior of others [0]. Researchers have also differentiated between self-handicapping and attributions [0]. Attributions of incompetence happen following failure, that is to say *retrospectively*, and self-handicapping, on the contrary, happens *prior* to the event occurrence. Thus, self-handicapping cannot be regarded as defensive mechanism, because it is conscious behavior or type of attribution, because it takes part before the event occurrence.

Jones and Berglas have suggested that self-handicapping behavior is caused by “abnormal investment in the question of self-worth” [0, p. 205] and its main goal is to externalize failure and internalize success. In the subsequent studies, a wide variety of self-handicapping behavior was described, including alcohol [0] and drug use [0, 0], physical symptoms [0], reduced effort [0], test anxiety [0] and lack of practice [0]. Research has shown that people actively arrange the obstacles so that if poor performance or failure happens, those obstacles are seen as the main reason rather than lack of ability [0, 0]. As known, failures that are explained by internal causes affect self-esteem more than failures that are explained by external factors. This observation leads to conclusion, that self-handicapping may be interpreted as a self-protective coping strategy which is used by subjects in the situations of uncertainty which impose a threat on self-esteem. Research data provides evidence that self-handicapping effectively protects self-esteem in the short-term [0, 0], however in the long term it impairs performance [0], and lower psychological well-being [0]. Self-handicapping behavior is likely to occur during evaluative situation, within which failure would present a threat to self-esteem and when the individual experiences feelings of uncertainty [0, 0]. McCrea and Hirt have found out consistent gender differences in choice of self-handicapping behavior: women are less likely to engage in behavioral forms of self-handicapping [0]. Their research findings suggested that women valued displaying of effort [0] and thus were less likely to use reduced effort as the self-handicapping strategy [0].

Objectives of this research

For this research, in order to conceptualize self-handicapping as a non constructive proactive coping strategy, we set forth the question about personality precursors of the constructive and

non constructive forms of coping behavior, based on the hierarchical structural model of personality-mediated differences in coping behavior, developed by the authors [0]

The model accounts for the individual differences in the evaluation of the situations which call for the decision making as to the choice of the coping efforts at three levels: 1. Primary (affective) appraisal of the situation, determined by genetic factors (emotional stability vs. neuroticism); 2. The cognitive evaluation by the individual of the available coping resources, determined by the level of ego-identity and ego-involvement [0]; 3. The generalized appraisal of the situation and oneself as an agent of coping behavior, determined by psychological well-being [0].

We hypothesized, that individuals who, in the situation which requires coping efforts, perceive it as a challenge and appraise cognitive resources as sufficient, will use constructive proactive coping strategies (preventive, strategic, reflexive and others). On the other hand, those, who perceive situation as a threat, and their resources as insufficient, will likely resort to a non constructive proactive coping conceptualized in the form self-handicapping. To test the psychological reality and expediency of the model in empirical research was carried out.

METHOD

Participants

The sample included 120 participants, aged 18-21 (mean age 19 years), undergraduate students of Oles Honchar Dnipropetrovsk National University, currently continuing their education during the 2013-2014 academic year. Of the participants, 65.4 % (n= 85) are female and 34,6 % (n= 45) are male. Participation in the empirical study was a part of their course work for which students were supposed to get credit after completing the course.

Materials

Coping Inventory for Stressful Situations (CISS)

The Coping Inventory for Stressful Situations was used to measure task -, emotion -, and avoidance-oriented coping strategies (Endler & Parker, 1990, 1999; adapted to the Ukrainian culture in 2004 by Krukova). The measure consists of 46 items to which subjects respond on a seven-point Likert scale ranging from 1 – “strongly disagree”, to 7 – “strongly agree”. The stem question requests that individuals rate how much they engage in each activity when they encounter difficult, stressful or upsetting situations. Sample items for the respective subscales include: task-oriented coping, “Think about how I solved similar problems”; emotion-oriented coping, “Blame myself for not knowing what to do”; and avoidance-oriented coping, “Watch TV; call a friend”. Reliability and validity estimates for the Ukrainian adaptation of CISS provide support for internal consistency of all the scales. Cronbach $\alpha = .876$ for the whole inventory, $\alpha = .853$ for the problem-focused coping; $\alpha=.877$ for emotion-focused coping and $\alpha=.814$ for the avoidance coping.

Proactive Coping Inventory (PCI)

PCI consists of 6 subscales, 55 items total (Greenglass & Schwartz & Taubert, 1998, adapted to the Ukrainian culture by E.Starchenkova, 2002, modified by M. Yaltonsky, 2009). The six subscales of the Ukrainian adapted version of PCI are: The Proactive Coping Scale, the Reflective Coping Scale, Strategic Planning, Preventive Coping, Instrumental Support Seeking, and Emotional Support Seeking. The subjects are asked to evaluate the degree of agreement with the following statements on a 4-point scale, from 1 - "totally disagree" to 4- "totally agree". The authors note that in case of shortage of time, The Proactive Coping Scale can be used as the single independent measure. The Proactive Coping Scale combines autonomous goal setting with self-regulatory goal attainment cognitions and behavior (Greenglass, 1998). The scale has

high internal consistency, Cronbach $\alpha = .85$. The Reflective Coping Scale consists of 11 items and includes contemplating about various behavioral alternatives, brainstorming, analyzing problems and resources, etc. The Reflective Coping Scale has internal consistency as seen in Cronbach $\alpha = .79$. Strategic planning subscale comprises of 4 items and focuses on breaking extensive tasks into manageable components as well as generating goal-oriented schedule of action. This scale has acceptable reliability, $\alpha = .71$. Preventive Coping deals with anticipation of possible stressors and initiation the preparation before stressors develop fully. The 10-item Preventive Coping Scale correlates positively with another measure of Preventive Coping (Peacock & Wong, 1990), with Internal Control, Active Coping, Planning and Acceptance. Instrumental Support Seeking combines seeking of assistance, information or advice about what to do and the greater the seeking of empathy from others. Finally, Emotional Support Seeking 5-item subscale deals with seeking the advice and empathy from others.

Self-handicapping Scale

The Self-Handicapping Scale is comprised of 25 statements designed to assess an individual's proclivity to display self-handicapping behavior. For each statement, subjects were asked to indicate their level of agreement on a six-point scale. Large group testing sessions indicate that the scale exhibits acceptable internal consistency (Cronbach alpha = .79) and test-retest reliability ($r = .74$ after one month) (Rhodewalt 1990). The predictive ability of the scale is confirmed by a number of studies (e.g., Rhodewalt, 1990, 1994; Strube, 1986). The instrument was translated into Ukrainian for the first time by an experienced researcher with a first degree in translation and then checked by the research team, who were fluent in both English and Ukrainian. Care was taken to ensure each item translated retained a meaning as close as possible to the original version by means of a back translation process.

NEO Five-Factor Inventory (NEO-FFI)

NEO Five-Factor Inventory (Costa et al., 1992, adapted by V. Orel) is a 60-item inventory, comprising questionnaires for measuring the Big Five personality factors. Participants in our study rated 60 behavior-descriptive statements on 7-point Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree), indicating the degree to which they thought the items were characteristic of them. The NEO-FFI is one of the most widely used measurement tools of the Big Five and has very strong psychometric properties. Six-year test-retest reliability has ranges from .63 to .82. For the NEO FFI (the 60-domain-only version), the internal consistencies were: for neuroticism $\alpha=.79$; extraversion $\alpha=.79$; openness to the new experience $\alpha=.68$; agreeableness $\alpha =.75$; conscientiousness $\alpha=.83$. Adapted version Cronbach alphas reliabilities were reported as follows: E = .76, N = .63, O = .75, C=.73, A=.79.

The Positive and Negative Affect Scale (PANAS)

The Positive and Negative Affect Scale (Watson et al., 1988, adapted to Ukrainian culture in 2012 by E.Osin) intended to assess general positive and negative affect. The scale is comprised of 2 subscales measuring positive and negative affect respectively. PANAS is composed of 20 adjectives describing different feelings and emotions. Subjects are asked to read each adjective and mark how often he or she felt this way in the past few weeks, on a 5-point Likert from 1 – “almost never” to 5 – “very strongly”. Internal consistencies as seen in Cronbach alpha are: for positive affect =.89, and for negative affect = .86.

The Satisfaction with Life Scale (SWLS)

The 7-point Likert scale that has been developed by Diener et al. (1985) and adapted into Ukrainian culture by D. Leontiev and E.Osin (2008) contains five items. The internal

consistency (Cronbach α) and test-re-test coefficient of the adapted version of the scale is .75 and .70 respectively.

Mental Health Continuum – Short Form (MHC-SF)

MHC-SF, designed by Keyes (2006) is composed of 14 items and provides measures of subjective well-being, psychological well-being and social well-being. We used our own translation into the Ukrainian language without adaptation (as allowed by the author, if the scale is used for research). The short form has shown good internal consistency (Cronbach $\alpha=.80$) and discriminatory validity. Test-re-test reliability estimates range from .57 to .82 for the total scale (Keyes, 2007). The three factor structure of the short form - emotional, psychological, and social well-being – has been confirmed in American representative samples (Keyes, 2005, 2009).

Rosenberg Self-Esteem Scale (RSE)

For measuring global self-esteem Rosenberg Self-Esteem Scale (1965) was used. The scale consists of 10 items, responses being measured on 4-point scale, from 1- "strongly disagree" to 4- "strongly agree". Cronbach α reliabilities for the RSE are reported from .72 to .88.

The General Self-Efficacy Scale (GSE)

The General Self-Efficacy Scale is a 10-item psychometric scale that is designed to assess optimistic self-beliefs to cope with a variety of difficult demands in life. The scale has been originally developed in German by M.Jerusalem and R. Schwarzer in 1981 and adapted to the Ukrainian culture by V.Romek in 1996. During adaptation study single general factor was confirmed and internal consistency coefficient was reported as $\alpha=.847$.

Dispositional Characteristics of Personality Self-Evolution

To assess individual's awareness of oneself as an agent of self-evolution, we used a new Ukrainian thought-out inventory "Dispositional Characteristics of Personality Self-Evolution" (Kusikova, 2012). The Inventory consists of 30 statements rated on a five-point Likert Scale (with 5- "very much like me" and 1- "not like me at all"). The statements are formulated like: "I believe in my potential abilities and strive to self-actualization"; "I enjoy doing things that require maximum commitment and efforts"; or "In my life I am guided by the ideals of the truthfulness, goodness and beauty" etc. The Inventory has 3 scales. The meaning of the first scale is described by the author (Kusikova, 2012) as the awareness of the individual in the necessity of self-growth, self-evolution; openness to changes, interest in the events of the surrounding world; interest in one's own inner world. The meaning of the second scale "Conditions of self-evolution" is defined in the terms of autonomy, positive self-perception, strength and maturity of the self-image; awareness of one's goals, active life strategies. The meaning of the third scale "Mechanisms (functional means) of self-evolution" is defined in terms of self-comprehension (strive to authenticity); self-reflection (self-analysis)' awareness of the discrepancies between the real and the ideal self; sensitivity to the feedback from other people. The author reports internal consistency of the Inventory $\alpha=.70$

Procedure

The research data was acquired from the students at Oles Honchar Dnipropetrovsk National University during 2013-2014 academic year. The participants of this research were included in the study following a short brief about the research and then were asked to fill in suggested questionnaires individually and provide their demographic details to the authors of this research. The analysis of the data was carried out via IBM PAWS SPSS 18 (SPSS, 2009). Two types of research procedures have been carried out: the correlation analysis (r-Pearson product moment correlation coefficients) was assessed among all the variables included in the

hypothesis; factor analysis (the method of independent components with Varimax rotation) was carried out to identify the variables with eigen value exceeding 1.

FINDINGS

As a result of the correlation analysis it was determined that there were significant relationship between all the variables in the model, supporting the hypothesis (see Table 1).

Table 1. Relationship coefficients between the proactive forms of coping and personality variables

Hypothesized dependent variables of Self-Regulation (proactive coping strategies)	Hypothesized independent personality variables of self-authenticity								
	Neuroticism	Self-Esteem	Belief in Self-Efficacy	Dispositional self-evolution resources	Needs of dispositional self-evolution	Conditions of dispositional self-evolution	Mechanisms of dispositional self-evolution	Subjective well-being	Mental Health Continuum
Proactive	-.335**	.264**	.434**	.364**	.107	.570**	.048	.295*	.318**
Reflexive	-.122	.169**	.328**	.235**	-.141	.329**	.229**	.185*	.144
Strategic	-.133	.255**	.406**	.180*	-.072	.252**	.141	.143	.168*
Preventive	-.089	.238**	.269**	.060	-.200**	.194*	.078	.207*	.288**
Seeking emotional support	.096	.078	-.004	.162*	-.007	.067	.270**	.065	.093
Seeking instrumental support	-.022	.156*	.216**	.230**	.108	.187*	.157*	.057	.251**
Self-handicapping	.292**	-.105	-.247**	-.203*	-.072	-.313**	.022	-.045	-.230**

* $p \leq .05$, ** $p \leq .01$

The results of the research confirmed the relevance of choice of self-handicapping as a non-constructive coping-strategy. As shown in Table 2, it negatively correlates with belief in self-efficacy ($r = -.247$, $p \leq .01$), dispositional self-evolution resources ($r = -.203$, $p \leq .05$), conditions of self-evolution dispositional self-evolution resources ($r = -.313$, $p \leq .01$), and mental health continuum ($r = -.230$, $p \leq .01$).

As shown in Table 1, the probability of the choice of proactive coping strategy significantly correlates with 7 out of 9 personality variables, besides, 6 correlations were determined to be positive predictors and 1 (level of neuroticism) is negative predictor of the probability of choice of the proactive coping strategy.

The analysis of correlations of the personality variables with self-regulation efficacy related to the use of the constructive proactive forms of coping behavior and the non constructive form of proactive coping, which we ascribed to self-handicapping, have showed that proactive coping negatively correlates with neuroticism ($r = -.335$, $p \leq .01$) and positively correlates with level of self-esteem ($r = .264$, $p \leq .01$), belief in self-efficacy ($r = .434$, $p \leq .01$), dispositional self-evolution resources ($r = .364$, $p \leq .01$), conditions of dispositional self-evolution ($r = .570$, $p \leq .01$), subjective well-being ($r = .295$, $p \leq .01$) and mental health continuum ($r = .295$, $p \leq .01$).

With the help of the factor analysis, it has been found out that there were three factors which characterized the personality precursors of the choice of different forms and strategies of

coping behavior. The first component (factor) named *personality precursors of the constructive psychological coping personality precursors of adaptive functioning* included negative correlation with emotion-focused coping ($r = -.456$), neuroticism ($r = -.414$), self-handicapping ($r = -.372$), and positive correlations with a level of belief in self-efficacy ($r = .710$), constructive forms of proactive coping ($r = .544$), and task-oriented coping-strategy ($r = .694$). The personality precursors included in this factor are: adequate self-esteem ($r = .368$), striving for self fulfillment ($r = .527$), mental health continuum ($r = .496$), as well as various types of constructive proactive coping strategies.

The distinguishing feature of the second factor, identified by the factor analysis, was that it included highly significant intercorrelations of four of five global dispositional personality traits: conscientiousness ($r = .784$), openness to new experience ($r = .728$) extraversion ($r = .631$), and agreeableness ($r = .574$). In addition, it included negative correlation of self-handicapping ($r = -.236$), distraction as a coping strategy ($r = -.244$), positive correlations of subjective well-being ($r = .450$) and mental health continuum ($r = .427$) so, this factor was named as *personality precursors of adaptive functioning*. This structure of the intercorrelational links suggests that in order to ascribe the priority to the problem-focused coping strategy, the individual is supposed to be aware of the availability in one's experience of the appropriate coping resources.

The third factor was named personality precursors of maladaptive functioning, and included: avoidance-oriented coping strategy ($r = .785$), distraction as a coping strategy ($r = .703$), social distraction ($r = .642$), emotion-oriented coping ($r = .540$), seeking for instrumental support ($r = .504$) and self-handicapping ($r = .370$).

These findings convincingly confirm, in our opinion, the conceptualization of self-handicapping as a non constructive form of proactive coping behavior.

DISCUSSION

The major findings of this research can be summed up as follows:

- The phenomenon of self-handicapping can be claimed to be not only a motivational strategy but also a form of non constructive coping behavior, as the subjects with high level of ego-involvement and ego-identity had the lowest levels of the tendency to resort to self-handicapping, and, vice versa, the subjects with low levels of ego-involvement and ego-identity frequently resort to self-handicapping. The latter proves the status of self-handicapping as a non constructive form of proactive coping behavior.
- The positive ego-identity (high self-esteem and belief in self-efficacy) can be claimed to determine the choice of constructive forms of proactive coping.
- The individuals with high level of neuroticism are prone to resort to the non constructive form of proactive coping, operationalized in this research in the form of self-handicapping.
- High levels of the subjective well-being and mental health continuum, as the indicators of the generalized appraisal of the life situation and oneself as an agent of activity, are positive predictors of diverse repertoire of the constructive proactive coping behavior
- Finally, the role of self-esteem in the resorting to self-handicapping as a non constructive proactive coping behavior. Jones and Berglas suggested, that self-

handicappers have generally positive, but uncertain image of their competence and that “suspected truth is too horrible to risk” [0, p. 203]. In another study by Dianne M. Tice, it has been determined that different people use self-handicapping for self-protection and self-enhancement: high-self-esteem individuals resort to self-handicapping in order to enhance success, whereas low-self-esteem individuals resort to self-handicapping to protect self concept against esteem-threatening situations [0]. Another possibility for future research is examining the effects of implicit vs. explicit self-esteem on the self-handicapping. As L. Spalding and C. Hadrin [0] determined, implicit and explicit self-esteem may be disassociated and have different effects of self-handicapping behavior: those, with low measures of both explicit and implicit self-esteem tended to self-handicap about their performance more. Thus, the question of self-esteem remains open for the future research.

- In conclusion, research results suggest that personality factors are fundamental in understanding coping ability and make a contribution to the body of research on the relationship between personality and coping.

References:

- Arkin, R. M., Oleson, K. C. & Carroll, P. J. (Eds.) (2010). *Handbook of the Uncertain Self*. New York: Taylor and Francis.
- Arkin, R. M. & Oleson, K. C. (1998). Self-handicapping. In J. M. Darley & J. Cooper (Eds.) *Attribution and social interaction: The legacy of Edward E. Jones* (pp. 313 - 347). Washington, DC: American Psychological Association.
- Arshava, I., Nosenko, E., Nosenko, D. (2013). Personality-mediated differences in coping behavior as precursors of the subjective well-being. *European Scientific Journal*, Special Edition, Vol. 2. 548-558.
- Berglas, S., & Jones, E.E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. *Journal of Personality and Social Psychology*, 36,405-417
- Carver, C.S., & Scheier, M.F. (1996) Self-regulation and its failures. *Psychology Inquiry*, 7, 32
- Colman, A. M. (2009). *A Dictionary of Psychology* (3 Ed.). New York: Oxford University Press. p.682.
- Costa, P.T., McCrae, R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, Vol 4 (1), 5-13.
- Cramer, P., & Brilliant, M.A. (2001). Defense Use and Defense Understanding in Children. *Journal of Personality*, Vol. 69, Iss. 2, p.297-322
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Endler, N.S., Parker, J.D. Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, Vol 58 (5), May 1990, 844-854.
- Endler, N.S., & Parker, J.D.A. (1999). *Coping inventory for stressful situations (CISS)*: Manual (2nd Ed.). Toronto: Multi-Health Systems.
- Folkman, S., Lazarus, R.S. et al. Dynamics of Stressful Encounter: Cognitive Appraisal, Coping, and Encounter Outcomes. *Journal of Personality and Social Psychology*. (1986). Vol. 50, No 5, 992-1003.
- Greenglass, E. (with R. Schwarzer). (1998).The Proactive Coping Inventory (PCI). In R. Schwarzer (Ed.), *Advances in health psychology research (CD-ROM)*. Berlin: Free University of Berlin. Institut für Arbeits-, Organisations- und Gesundheitspsychologie.
- Greenglass, E. (2002). Chapter 3. Proactive coping. In E. Frydenberg (Ed.), *Beyond coping: Meeting goals, vision, and challenges*. London: Oxford University Press, p.37-62.

Higgins, J.E., Endler, N.S. (1995) Coping, life stress, and psychological and somatic distress, *European Journal of Personality*, Vol 9, Issue 4, p.253-270.

Higgins, R.L., Snyder, C.R., & Berglas, S. (1990). *Self-handicapping: The paradox that isn't*. New York: Plenum.

Hirt, E.R., McCrea, S.M., & Kimble, C.E. (2000). Public self-focus and sex differences in behavioral self-handicapping: Does increasing self-threat still make it "just a man's game?". *Personality and Social Psychology Bulletin*, 26, 1131-1141.

Hirt E.R., McCrea, S.M., & Boris, H.I. (2003) "I know you self-handicapped last exam": Gender differences in Reactions to Self-Handicapping. *Journal of Personality and Social Psychology*, Vol. 84, No. 1, p. 177-193.

Jones, E.E., & Berglas, S. (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement. *Personality and Social Psychology Bulletin*, 4, 200-206.

Keyes, C.L.M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, 76, 395-402.

Koloditz, T.A., & Arkin, R.M. (1982). An impression management interpretation of the self-handicapping strategy. *Journal of Personality and Social Psychology*, 43, 492-502.

Kusikova, S. (2012). *Psychological fundamentals of the development of the personality self-evolution over youth*. Sumy: MacDen Publishing.

Lazarus, R.S. (1966). Psychological stress and the coping process, New York:McGraw-Hill

McCrea, S.M., & Hirt, E.R. (2001). The role of ability judgments in self-handicapping. *Personality and Social Psychology Bulletin*, 27, 1378-1389.

McCrea, S. M., Hirt, E. R., Hendrix, K. L., Milner, B. J., & Steele, N. L. (2008).The worker scale: Developing a measure to explain gender differences in behavioral self-handicapping. *Journal of Research in Personality*.949-970

McCrea, S. M., Hirt, E. R., & Milner, B. J. (2008).She works hard for the money: Valuing effort underlies gender differences in behavioral self-handicapping. *Journal of Experimental Social Psychology*.292-311

McCrea, S.M. (2008) Self-handicapping, excuse making, and counterfactual thinking: Consequences for self-esteem and future motivation. *Journal of Personality and Social Psychology*, Vol 95 (2), 274-292.

Osin, E. (2012). The measurement of positive and negative emotions: Development of the Russian version of PANAS. *Psichologia, Journal of Vishei Shkoli Ekonomiki*, Vol 9, No. 4, p. 91-110.

Peacock, E.J. & Wong, P.T.P. (1993). Relations Between Appraisals and Coping Schemas: Support for the Congruence Model. *Canadian Journal of Behavioral Science*, 25:1, 64-80.

Pyszczynski, T. & Greenberg, J. (1983). Determinants of reduction in intended effort as a strategy for coping with anticipated failure. *Journal of research in Personality*, 17, 412-422.

Rhodewalt, F., Saltzman, A.T., & Wittmer, J. (1984). Self-handicapping among competitive athletes: The role of practice in self-esteem protection. *Basic and Applied Social Psychology*, 5, 197-209.

Rhodewalt, F., Morf, C., Hazlett, S., & Fairfield, M. (1991). Self-handicapping: The Role of discounting and augmentation in the preservation of self-esteem. *Journal of Personality and Social Psychology*, 61, 122-131.

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

Schaufelli, W.B., Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315

Schwarzer, R., Jerusalem, M., & Romek, V. (1996). Russian version of the General Self-Efficacy Scale. *Foreign Psychology (Moscow)*, 7, p. 71-77.

Schwarzer, R., & Taubert, S. (2002). Tenacious goal pursuits and striving toward personal growth: Proactive Coping. In E. Frydenberg (Ed.), *Beyond coping: Meeting goals, vision, and challenges*. London: Oxford University Press, p.19-35

Smith, T. W., Snyder, C.R., & Handelsman, M.M. (1982). On the self-serving function of an academic wooden leg: Test anxiety as self-handicapping strategy. *Journal of Personality and Social Psychology*, 44, 787-797.

- Smith, T.W., Snyder, C.R., & Perkins, S.C., (1983). The self-serving function of hypochondriacal complaints: Physical symptoms as self-handicapping strategies. *Journal of Personality and Social Psychology*, 44, 787-797.
- Snyder, C.R., & Smith, T.W., (1982). Symptoms as self-handicapping strategies: The virtues of old wine in a new bottle. In G. Weary & H.L. Mirel (Eds.), *Integrations of clinical and social psychology* (p.104-127). New York: Oxford University Press.
- Snyder, M.L., Smoller, B., Stretna, A., & Frankel, A. (1981). A comparison of egotism, negativity , and learned helplessness as explanations for poor performance after unsolvable problems. *Journal of Personality and Social Psychology*, 40, 24-30.
- Spalding, L.R., Hardin, C.D. (1999). Unconscious Unease and Self-Handicapping: Behavioral Consequences of Individual Differences in Implicit and Explicit Self-Esteem. *Psychological Science* vol. 10 no 6.
- Tice, D.M. (1991). Esteem protection or enhancement? Self-handicapping motives and attributions differ by trait self-esteem. *Journal of Personality and Social Psychology*, Vol 60(5), May 1991, 711-725
- Tucker, J.A., Vuchinich, R.E., & Sobell, M.B. (1981). Alcohol consumption as a self-handicapping strategy. *Journal of Abnormal Psychology*, 90, 220-230.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 47, 1063-1070.
- Zuckerman, M., & Tsai, F. F. (2005). Costs of self-handicapping. *Journal of Personality*, 73(2), 411-442.