

# Personal Growth Initiative, Resilience and Psychological Wellbeing in Young Adults of Pakistan

Areej Asif<sup>1</sup>, Huma Yasin<sup>2</sup> and Laraib Iqrar<sup>3</sup>

<https://doi.org/10.62345/jads.2024.13.1.35>

## Abstract

*This study determined the link between personal growth initiative, resilience, and psychological well-being among young adults in the uncertain social context of Pakistan. N= (300), aged between 19 and 30 years, were recruited from different universities in Lahore, Pakistan. A convenience sampling methodology was adopted for the survey. The results demonstrated that personal growth initiative and resilience predicted and positively correlated with psychological well-being. This study found no significant differences in the basis of gender between male and female adults in terms of personal growth initiative and resilience. Therefore, a difference of moderate practical significance was shown for psychological well-being between male and female students. This study contributes to the literature and body of knowledge on personal growth initiative, resilience, and psychological well-being through the lens of uncertainty posed by the social context of Pakistan. It has the potential to enrich the discourse on developmental studies. Furthermore, the findings inform the development of effective interventions that could address the needs of young adults in maintaining their psychological well-being.*

**Keywords:** Personal Growth Initiative, Resilience, Psychological Well-being, Young Adults.

## Introduction

In Pakistan, where socio-cultural changes are occurring rapidly, economic ups and downs are commonplace, and the world is becoming more interconnected daily, uncertainty is a constant threat. Growing concern exists about how these uncertainties could impact people's well-being, particularly young adults. This is because Pakistan's young adult population, considered agents of change and at the intersection of tradition and modernity, is particularly affected as the country navigates the challenging process of social development. Young people in Pakistan develop their identities as they grow into adults and also respond to a variety of external challenges that can impact their mental health. These people struggle to form a personal identity in the face of an ever-changing social landscape against the backdrop of globalization, political upheaval, and technological advances. The stakes for mental wellness, resilience, and personal growth are higher than ever. Looking through this prism, it becomes clear how important it is to understand and improve the adaptive skills of people navigating such uncertainties (Khan et al., 2015).

Personal Growth Initiative (PGI) is the conscious and active pursuit of personal development, self-improvement, and growth. It's about taking responsibility for your personal development and

---

<sup>1</sup>BS Psychology Student, Department of Humanities, COMSATS University Islamabad, Lahore Campus.

Email: [areejasif30@gmail.com](mailto:areejasif30@gmail.com)

<sup>2</sup>PhD Scholar, University of Central Punjab and Lecturer Psychology, Department of Humanities, COMSATS University Islamabad, Lahore Campus. Corresponding Author Email: [humayasin@cuilahore.edu.pk](mailto:humayasin@cuilahore.edu.pk)

<sup>3</sup>MS Clinical Psychology Student, Government College University, Faisalabad. Email: [Hafizakainat154@gmail.com](mailto:Hafizakainat154@gmail.com)



consciously improving your skills, knowledge, and abilities. It includes behavioral and cognitive traits such as efficacy, motivation, learning, broad objectives, and strategies to achieve goals. The first component of PGI, readiness for change, explores a person's openness and willingness to accept change, highlighting a proactive mentality that views transition as an opportunity. The second component, intentional behavior, evaluates the deliberate and purposeful acts people take in their quest for personal growth, emphasizing the conscious effort made to improve oneself. The third and fourth components, using resources and playfulness, emphasize flexibility and resourcefulness as they focus on a person's capacity to recognize and take advantage of internal and external resources to support their personal development (Robitschek, 1998).

Personal growth is the capacity to transform a traumatic experience into a positive life transition. This phenomenon might be expressed in three significant realms: self-awareness, interpersonal relations, and life philosophy. The fact that resilience and personal growth initiatives share psychological mechanisms points to the reciprocal nature of the relationship. Both ideas rely heavily on positive cognitive appraisals, adaptive coping mechanisms, and a sense of autonomy. People who take personal growth initiatives often have higher levels of self-efficacy, which is essential for overcoming obstacles. Resilient people, on the other hand, use their adaptive coping skills to overcome personal growth challenges more effectively. PGI also encourages people to keep looking for growth and challenge, which can result in achieving their life goals and finding personal happiness (Tedeschi et al., 2018).

Resilience is the mental strength that enables people to adapt constructively to emergencies. The most common definition of resilience in the past few years has been positive adaptation despite adversity (Luthar, 2006). Pakistan's social fabric has various stressors that people have to deal with. These can range from cultural nuances to economic uncertainty. Resilience can be crucial when living in an uncertain environment with high social expectations for relationships, careers, and societal norms. It can also be necessary when dealing with global events like pandemics and political unrest, rapid technological advancements that could result in skill gaps and a constant need for adaptation, uncertain job markets, and economic downturns. The prevalence of PTSD in Pakistan, both due to natural disasters and ongoing conflict, is high. Therefore, the risks of traumatic experiences are higher than ever in the continuing social structure of Pakistan, and having said that, resilience plays a key role for individuals who are exposed to such high-risk situations (Khan et al., 2015).

According to research, psychological well-being fosters resilience by enabling adaptive coping and flexible thinking. Psychological well-being is a multifaceted concept that encompasses all factors of mental health and indicates both the absence of mental illness and the presence of satisfactory and good life experiences. It is the subjective assessment of one's life, including social, emotional, and cognitive aspects (Diener, 1984).

The dynamic interaction that shapes how people deal with life's problems, pursue their goals, and maintain a happy state of mind is strongly influenced by the interconnection between personal growth initiative, resilience, and psychological well-being. This connection suggests that personal development contributes to deeper and more meaningful well-being than hedonic pleasures (Ryff & Keyes, 1995).

The study's theoretical framework draws upon "self-determination theory," which includes the idea that humans' psychological requirements for relatedness, competence, and autonomy are innate. SDT can contribute to the study by emphasizing how personal growth initiatives can satisfy the need for competence and independence. Furthermore, SDT highlights the possibility that personal

initiative frameworks based on intrinsic motivation may impact psychological well-being more (Deci & Ryan, 2008).

## Literature Review

In the context of young adults, understanding the intricate interplay among these constructs is essential for unraveling the factors that contribute to a flourishing and resilient mindset during this critical phase of life. Keeping this in mind, a growing body of interest relies upon exploring various positive psychology constructs. This study attempts to elucidate the interconnectedness of these dimensions and their collective impact on the holistic development of individuals during this formative stage. Numerous studies have explored the associations between personal growth initiative and psychological well-being. A study discovered a positive association between personal growth initiative and psychological well-being, along with a negative association with psychological distress. Also, individuals with high personal growth initiative and psychological well-being experienced fewer mental health problems (Nadia, 2015).

Psychological well-being and resilience share standard psychological features involved in positive human functioning. The theoretical dimensions of psychological well-being are deeply rooted in the philosophical approach to humanistic, existential, developmental, and clinical psychology. For this purpose, another study examined the predictable relationship between psychological well-being and resilience and the differentiation in the functioning of male and female university students in Karachi on the constructs of psychological well-being and resilience. Findings indicated that psychological well-being positively predicted resilience (Amreen & Malik, 2021).

The three resilience models mentioned in the literature are the compensation model, the challenge model, and the protective factor immunity to vulnerability. In the compensation model, resilience is viewed as a reduction in risk exposure. This model views compensating and risk factors as independent factors contributing to an outcome. A study examined the influence of EI and PGI on subjective happiness among undergraduate students in Ghana. The results showed that PGI and EI had a positive correlation and that both factors predicted students' subjective satisfaction. PGI and EI may be related since emotional self-efficacy, a component of EI, is correlated with PGI levels (Fergus & Zimmerman, 2005).

Continuity in adversity in life has been seen to be associated with decreased resilience, which can result in poor psychological well-being. There are consistent findings in various studies that resilience can be a significant framework leading to enhanced psychological well-being. Psychological distress negatively correlates with resilience, which conceptualizes it as a protective construct mitigating the risks of psychological outcomes. Resilient individuals are more likely to take the initiative for their personal growth by enhancing their social support system and to have self-efficacy in dealing with setbacks, thus benefiting their overall psychological well-being. Therefore, resilience is a universal prerequisite for improved psychological well-being (Backer et al., 2015; Betancourt & Khan, 2008).

Many robust findings exist on resilience for various groups of individuals, such as patients and healthcare workers (Morse et al., 2021), children and young adults (Cefai et al., 2014; Nicoll, 2014), and university inductees (Allan et al., 2014). Aligning with previous studies, the literature has conceptualized resilience as being exposed to crucial circumstances and utilizing coping strategies to overcome setbacks and become successful (Delgado et al., 2017). Therefore, in the comprehensive review of previous literature, several significant studies showed that personal growth initiative plays an important role in the well-being of an individual. It leads people to have

meaning and purpose in life. In addition, researchers have shown that resilience is another primary variable influencing psychological well-being.

## **Study Rationale**

Pakistan faces several psychological challenges, particularly given the social unpredictability that has increased significantly in recent years. These challenges include political unrest, terrorist attacks, and economic downturns, which fuel conflict and violence, which in turn cause trauma and undermine people's psychological capital. Furthermore, young adulthood is a crucial developmental period in which people may encounter various difficulties related to social interactions, career advancement, and identity formation (Khan et al., 2015). Therefore, there is limited research linking such studies to the context of Pakistan, its increasing psychosocial crisis, and the drastic impact adults face on their personal growth. The present study aims to highlight these constructs that may influence how young adults perceive and respond to challenges, thereby contributing to the broader psychology literature. Furthermore, understanding these factors can inform culturally sensitive interventions and policies.

## **Study Hypothesis**

The following are the hypotheses of the study:

- There would be a positive correlation between personal growth initiative, resilience, and psychological well-being in young adults.
- Individuals who exhibit higher levels of personal growth, initiative, and resilience will experience greater psychological well-being.
- There is a significant difference in personal growth initiative, resilience, and psychological well-being in young adults concerning their gender.

## **Methodology**

### **Participants and Sampling Strategy**

A correlational research design was utilized, which allowed for the examination of associations between personal growth initiative, resilience, and psychological well-being without manipulation of these variables, providing valuable insights into the dynamics of constructs in this study. The sample consisted of young adults ( $N=300$ ), both male and female, with an age range of 19 to 30 years ( $M=21.65$ ,  $SD=2.35$ ) and years of job experience ( $M=0.61$ ,  $SD=1.36$ ). A convenient sampling technique was used to facilitate physical data collection from different universities and job sectors, ensuring a diverse representation of the target population. The distribution of the sample as per the male and female population was 50% ( $n=150$ ), respectively, i.e., an equal proportion of both genders. The respondents who participated were (a) male and female, aged 19 to 30, and (b) young adults from any university in any discipline.

### **Procedure**

Initially, approval for the research was taken from the ethical review board of COMSATS University. The scales for the research were selected considering their psychometric properties in view, and permissions were obtained from the authors. After this, the consent form was constructed, and the relevant demographic characteristics were added to explore variables that may influence the relationship under investigation. After the introduction and informed consent form, participants were provided with the demographic sheet and responded to questionnaires. All the

steps were followed to ensure the ethical integrity of the research process. The data was then analyzed using the Statistical Package for Social Science (SPSS, Version 27).

## Measures

### Demographic Questionnaire

Self-developed demographic information included age (in years), gender, qualifications, years of job experience, area of residence (urban or rural), marital status, family system (nuclear or joint), and birth order.

### Personal Growth Initiative Scale-II (PGIS-II)

Given the focus on young adults and their developmental processes, this study used the Personal Growth Initiative Scale-II (PGIS-II), a revision of PGIS-I. The PGIS-II consists of sixteen items rated on a 5-point Likert scale from 0 = strongly disagree to 5 = strongly agree. Readiness for change, plan-fulness, using resources, and intentional behavior are its four subscales (Robitschek, 1998).

### Personal Resilience Questionnaire (RAQ 8)

Personal Resilience Questionnaire (RAQ8), which is the short version (RAQ40), was used. The scale has eight items measuring eight elements rated on a Likert scale from 1 = never to 5 = always (Mowbray, 2012).

### Psychological Wellbeing Scale (PWB-18)

Psychological Wellbeing Scale (PWB) was used, which measures six aspects of well-being and happiness (autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance) and allows for holistic evaluation of psychological well-being. Respondents rated 18 statements using a 7-point scale (1 = strongly agree; 7 = strongly disagree (Ryff et al., 2007).

## Statistical Analysis

Descriptive statistics, including standard deviation, mean, frequencies, and percentages. The Cronbach alpha value was also calculated. For hypothesis testing, correlational analysis, hierarchical regression analysis, and an independent sample t-test were conducted on SPSS version 27. These analyses provided insights into the relationships between variables and allowed for identifying potential predictors of psychological well-being among young adults.

## Results

Table 1 indicates the demographic characteristics of the study participants, including age, gender, qualification, years of job experience, birth order, family system, marital status, and residency. The mean and standard deviation were calculated for continuous variables, while frequencies and percentages were reported for categorical variables.

**Table 1: Descriptive statistics of the demographic characteristics of the sample (N=300)**

Variables	<i>M</i>	<i>SD</i>	<i>f</i>	%
Age	21.65	2.359		
Years of Job Experience	0.61	1.365		
<b>Gender</b>				
Male			150	50.0
Female			150	50.0
<b>Qualification</b>				
Bachelors			283	94.3
Masters			17	5.7
<b>Residency</b>				
Urban			214	71.3
Rural			86	28.7
<b>Birth Order</b>				
First Born			75	25.0
Middle Born			109	36.3
Last Born			87	29.0
Only Child			29	9.7
<b>Marital Status</b>				
Married			37	13.0
Unmarried			263	87.3
Divorced			0	-
Widow			0	-
<b>Family System</b>				
Nuclear			183	61.0
Joint			117	39.0

Note: M=Mean, SD=Standard Deviation, *f*=Frequencies

**Table 2: Interrelation among personal growth initiative, psychological wellbeing and their subscales**

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13
Personal growth	-	.567**	.326**	.883**	.632**	.890**	.881**	.324**	.180**	.277**	.169**	.292**	-0.15
Resilience		-	.329**	.556**	.335**	.483**	.494**	.319**	.221**	.236**	.157**	.234**	0.79
Psy Wellbeing			-	.333**	.151**	.278**	.304**	.770**	.555**	.717**	.505**	.770	.490**
Inten behavior				-	.444**	.721**	.743**	.316**	.179**	.270**	.184**	.295**	0.13
Using Resources					-	.377**	.385**	.156**	.101	.143*	.022	.128*	0.14
Plan-fulness						-	.749**	.281**	.137*	.226**	.174**	.248**	-.017
Change Readiness							-	.305**	.178**	.273**	.158**	.283**	-.053
Self-acceptance								-	.272**	.478**	.377**	.505**	.252**
Purpose in Life									-	.278**	-.002	.355**	.244**
Autonomy										-	.235**	.541**	.174**
Envir Mastery											-	.328**	.054
Personal growth												-	.165**
Positive relations													-

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . 1=PGI 2=resilience 3=PWB 4=intentional behavior 5=using resources 6=plan-fulness 7=readiness for change 8=self-acceptance 9=purpose in life 10=autonomy 11=env mastery 12=pers growth 13=positive relation.

Table 2 showed results of correlational analysis between the study variables. The Personal Growth Initiative (PGI) has significant positive correlations with resilience and psychological well-being.

Moreover, significant positive correlations were found between all subscales of PGI and psychological wellbeing.

**Table 3: Hierarchical multiple regression analysis for psychological wellbeing**

Variables	B	95% CI for B		SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
		LL	UL				
<b>Step 1</b>						.03***	.03***
Constant	61.03***	46.75	75.32	7.26			
Age	1.01***	.35	1.66	.33	.17***		
<b>Step 2</b>						.15***	.12***
Constant	41.95***	27.27	56.63	7.46			
Age	.73***	.11	1.36	.316	.12***		
Resilience	.51***	.19	.83	.163	.20***		
Personal Growth Initiative	.19***	.06	.31	.064	.19***		

Table 3 presents the results of regression analysis for psychological wellbeing as criterion variable. Overall, the model explained 15% of the variance in psychological wellbeing,  $F(3) = 17.736$ ,  $p < .001$ . Demographic (age) of block 1 explained 3% variance in psychological wellbeing,  $F(1) = 9.23$ ,  $p > .003$ . Age predicted psychological wellbeing significantly. When personal growth initiative and resilience was added in block 2, the model explained 12% variance in psychological wellbeing,  $F$  change (2, 296) = 21.35,  $p < .01$ . Personal growth initiative and resilience positively predicted psychological wellbeing.

**Table 4: Mean differences between male and female students in subscales of personal growth, initiative, resilience and psychological wellbeing (N=300)**

	Female (n = 150)		Male (n = 150)		$t(df)$	$p$	Cohens d
	$M$	$SD$	$M$	$SD$			
Readiness for Change	14.91	3.77	14.43	4.49	.988(298)	.32	.11
Plan-fulness	18.17	4.56	17.91	5.65	.449(298)	.65	.05
Using Resources	8.61	3.46	9.07	3.61	-1.10(298)	.26	.13
Intentional behavior	15.27	3.55	14.81	4.47	.987(298)	.32	.11
Resilience	26.98	4.75	28.60	6.08	-2.56(298)	0.01	0.31
Autonomy	13.84	3.34	13.85	3.88	-.016(298)	.98	.00
Environmental mastery	12.85	3.18	13.03	3.19	-.471(298)	.63	0.05
Personal growth	15.30	3.80	15.23	3.93	.149(298)	.88	.01
Positive Relations	12.49	3.47	13.52	3.46	-2.577(298)	.01	0.29
Purpose in Life	13.19	3.47	13.30	3.25	-.292(298)	.77	0.01
Self-acceptance	14.75	3.65	14.59	4.19	.352(298)	.72	0.04

Table 4 presents a statistically significant difference between male and female students for psychological wellbeing and wellbeing subscales, such as environmental mastery and purpose in life, with male students having slightly higher scores. However, the effect size suggests this difference is of moderate practical significance.

## Discussions

This research examined the relationship between personal growth initiative, resilience, and psychological wellbeing. It was hypothesized that a significant positive correlation exists between personal growth initiative, resilience, and psychological wellbeing in young adults. The study results show that personal growth initiative significantly correlates positively with resilience and psychological wellbeing. Similarly, the relationship between subscales of personal growth initiative and psychological wellbeing, i.e., readiness for change, intentional behavior, planfulness, using resources, autonomy, environmental mastery, self-acceptance, purpose in life, positive relations, and personal growth, was also found to be significant and positively correlated. The findings support previous research, such as the finding that PGI and its subscales were positively correlated with psychological wellbeing (Robitschek, 1998).

The possible reason for this finding is that personal growth initiatives flourish well-being, as elevated levels of PGI indicate eudemonic wellbeing, which resides in the feelings of progression towards one's prospects. Young adults who actively engage in personal growth initiatives often demonstrate a sense of agency and purpose. This proactive approach enables them to get involved in goal-setting, surpass challenges, and remain steadfast in adversity, consistently striving for improvement (Ryff, 2018).

Through personal observations, it may be apparent that individuals actively engaging in personal growth initiatives often benefit from positive interpersonal dynamics and robust support networks. These individuals tend to seek out mentors, peers, or family members who provide encouragement, guidance, and feedback, facilitating their growth journey. Such individuals who draw strength from their connection with others exhibit higher levels of resilience, enabling them to effectively cope with setbacks and challenges encountered along their developmental journey. Such individuals perceive setbacks as opportunities for growth, fostering a positive outlook and greater satisfaction with life.

The study's second hypothesis was that individuals who exhibit higher levels of personal growth initiative and resilience will experience greater psychological wellbeing. The study's findings support the hypothesis, as the strong association between higher levels of personal growth initiative and resilience found in individuals also ascertains their enhanced psychological wellbeing. Studies in the past likewise aligned with this finding, as a study aimed to conceptualize and measure the construct of personal growth initiative and its relevance to psychological well-being. The results indicated that higher levels of personal growth initiative are more likely to make individuals experience greater psychological well-being. The positive associations found in this study support the idea that being proactive in one's personal development, readiness for change, resilience, and goal-directed behavior contribute significantly to overall psychological well-being (Robitschek, 1998).

According to personal observations, personal growth initiative is often driven by intrinsic motivation and a strong sense of purpose. Individuals prioritizing personal development tend to set meaningful goals aligning with their values and aspirations. This intrinsic motivation acts as a powerful driving force, enabling individuals to preserve themselves in the face of the uncertainty posed by the social context of Pakistan. Instead of viewing challenges as insurmountable obstacles, such individuals perceive them as a pathway toward self-discovery. This further enables them to exhibit flexibility in their thinking and problem-solving approaches, allowing them to navigate uncertainty and ambiguity with confidence and resourcefulness, which ensures their positive psychological well-being.



The third hypothesis of this study was that there is no significant difference in personal growth initiative, resilience, and psychological wellbeing in young adults concerning their gender. The findings showed no significant difference for the Personal Growth Initiative subscales (readiness for change, playfulness, using resources, and intentional behavior) in both male and female students. Similarly, no significant difference was found in resilience in both male and female students. There is a statistically significant difference between male and female students for psychological wellbeing subscales such as environmental mastery and purpose in life, with male students having slightly higher scores. However, the effect size suggests this difference is of moderate practical significance. Additionally, it is notable that no differences were found for other subscales, such as autonomy, personal relations, and self-acceptance, between both male and female students.

Possible reasons for this finding are that gender differences in coping strategies may contribute to variations in psychological well-being. Past research also aligns with this, such that males and females may employ varied coping strategies when facing stressors, which predict their overall psychological well-being (Secades et al., 2016).

Personal observations reveal that societal expectations and gender norms are essential in shaping individuals' perceptions of their environment and life purpose. Similarly, gender roles and expectations may influence how individuals cope with challenges, seek support, and pursue personal goals. For example, males in this society may feel more empowered to assert control over their surroundings and pursue meaningful goals, reflecting traditional gender roles emphasizing agency and goal-directed behavior. Moreover, according to personal interactions and observations, gender differences in some aspects of psychological well-being also emerge in response to specific stressors and life events. For example, females may experience higher levels of psychological distress, such as interpersonal conflicts and barriers to autonomy pertinent to patriarchal structures. In contrast, males may experience challenges related to societal expectations of success, competition, and emotional restraint. These gender-specific stressors can influence individuals' coping mechanisms and resilience, predicting their overall psychological well-being.

### Concluding Remarks

The significance of the study suggests that personal growth initiative, resilience, and psychological well-being in young adults within the uncertainty posed by societal challenges hold considerable research and practical applications. The intensity and predictability of uncertainty in this society are beyond one's reach and can thwart approaches to life. Also, young adulthood is a critical period of development where individuals may face various challenges, such as identity formation, career development, and social relationships. So, the findings inform the development of effective interventions that could address the needs of young adults in maintaining their psychological well-being. This can further lead to establishing long-term resilience-building programs to better adapt to ongoing challenging conditions in life. Considering these implications, this study would add to the flow of information, writing, examination, and understanding of psychological wellness.

### References

- Allan, J. F., McKenna, J., & Dominey, S. (2013). Degrees of resilience: profiling psychological resilience and prospective academic achievement in university inductees. *British Journal of Guidance & Counselling*, 42(1), 9–25. <https://doi.org/10.1080/03069885.2013.793784>
- Backer, P. M., Kiser, L. J., Gillham, J. E., & Smith, J. (2015). The Maryland Resilience Breakthrough Series Collaborative: A Quality Improvement Initiative for Children's Mental

- Health Services Providers. *Psychiatric Services*, 66(8), 778–780. <https://doi.org/10.1176/appi.ps.201500036>
- Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: protective processes and pathways to resilience. *International Review of Psychiatry*, 20(3), 317–328. <https://doi.org/10.1080/09540260802090363>
  - Biswas-Diener, R., Diener, E., & Tamir, M. (2004). The psychology of subjective well-being. *Daedalus*, 133(2), 18–25. <https://doi.org/10.1162/001152604323049352>
  - Delgado, C., Upton, D., Ranse, K., Furness, T., & Foster, K. (2017). Nurses' Resilience and the Emotional Labor of Nursing Work: An Integrative Review of Empirical Literature. *International Journal of Nursing Studies*, 70(70), 71–88. <https://doi.org/10.1016/j.ijnurstu.2017.02.008>
  - Edmondson, Olivia. J. H., & MacLeod, A. K. (2014). Psychological Well-Being and Anticipated Positive Personal Events: Their Relationship to Depression. *Clinical Psychology & Psychotherapy*, 22(5), 418–425. <https://doi.org/10.1002/cpp.1911>
  - Ehlers, C. S., & Wibrowski, C. R. (2007). Building Educational Resilience and Social Support: The Effects of the Educational Opportunity Fund Program Among First- and Second-Generation College Students. *Journal of College Student Development*, 48(5), 574–584. <https://doi.org/10.1353/csd.2007.0051>
  - Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A Framework for Understanding Healthy Development in the Face of Risk. *Annual Review of Public Health*, 26(1), 399–419. <https://doi.org/10.1146/annurev.publhealth.26.021304.144357>
  - Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The Construct of Resilience: a Critical Evaluation and Guidelines for Future Work. *Child Development*, 71(3), 543–562. <https://doi.org/10.1111/1467-8624.00164>
  - Mowbray, D., & Mas (Organization. (2015). *Derek Mowbray's guide to personal resilience*. Mas Publishing.
  - Robitschek, C., & Keyes, C. L. M. (2009b). Keyes's model of mental health with personal growth initiative as a parsimonious predictor. *Journal of Counseling Psychology*, 56(2), 321–329. <https://doi.org/10.1037/a0013954>
  - Ryff, C. D. (1989b). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081.
  - Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
  - Secades, X. G., Molinero, O., Salguero, A., Barquín, R. R., de la Vega, R., & Márquez, S. (2016). Relationship between Resilience and Coping Strategies in Competitive Sport. *Perceptual and Motor Skills*, 122(1), 336–349. <https://doi.org/10.1177/0031512516631056>
  - Tang, B., Deng, Q., Glik, D., Dong, J., & Zhang, L. (2017). A Meta-Analysis of Risk Factors for Post-Traumatic Stress Disorder (PTSD) in Adults and Children After Earthquakes. *International Journal of Environmental Research and Public Health*, 14(12), 1537. <https://doi.org/10.3390/ijerph14121537>
  - Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the Positive Legacy of Trauma. *Journal of Traumatic Stress*, 9(3), 455–471. <https://doi.org/10.1007/bf02103658>
  - Walker, B., Gunderson, L., Kinzig, A., Folke, C., Carpenter, S., & Schultz, L. (2006). A Handful of Heuristics and Some Propositions for Understanding Resilience in Social-Ecological Systems. *Ecology and Society*, 11(1). <https://doi.org/10.5751/es-01530-110113>
  - Weigold, I. K., Porfeli, E. J., & Weigold, A. (2013b). Examining tenets of personal growth initiative using the Personal Growth Initiative Scale–II. *Psychological Assessment*, 25(4), 1396–1403. <https://doi.org/10.1037/a0034104>