

JOB INSECURITY AND STRESS IN THE AGE OF ARTIFICIAL INTELLIGENCE: CAN RESILIENCE HELP?

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ABSTRACT

In the current competitive corporate environment, job insecurity and stress have emerged as significant concerns for employees. An examination of current research on resilience, job insecurity, and stress shows that there is limited investigation into how resilience affects the connection between job insecurity and stress. This research aims to examine how resilience influences the relationship between job insecurity and stress. Data was collected from 258 employees working in the Indian IT sector. The findings suggested moderating impact of resilience on the association between job insecurity and perceived stress. The study concludes by discussing the theoretical and practical significance of these results.

Keywords: Job Insecurity, Stress, Artificial Intelligence, Resilience

INTRODUCTION

Artificial intelligence has opened up new opportunities for efficiency, but it has simultaneously intensified concerns about job security for workers worldwide. According to a report by *The New York Times*, AI could impact up to 300 million full-time jobs (Kessler, 2023), while McKinsey highlights that 45% of jobs are susceptible to automation. In today's highly competitive corporate environment, job insecurity

and related stress have become increasingly critical issues for the workforce. With the ever-changing world economy, organizations are encountering steep competition from the competitors and are hit by the weakening demand of products and services. Most of the organizations are bleeding and find their sustenance route through cost minimization. Particularly the service sector resorts to cost minimization through downsizing. In such a scenario, job insecurity prevails amongst people. As a result of the job insecurity working population becomes vulnerable to stress. Workplace stress results in high absenteeism, high labor turnover, poor timekeeping, low morale, poor motivation, increased ill-health, accidents, and adversely affects performance (World Health Organization [WHO] 2024.). It does not stop at these only. As stress steps into the environment of work, it further makes one vulnerable to get short-tempered, disturbed sleep, erratic concentration, stomach ailments, and headache. As stress further assumes chronic proportions, it leads the individual to conditions like insomnia, high blood pressure, anxiety, and significantly weakens the immunity. Serious health conditions like obesity, depression, and heart diseases too develop with stress. The problem aggravates when the person under the influence stress engages in unhealthy activities like being abusive, indulging in overeating or eating unhealthily, taking recourse to drugs,

alcohol, or smoking as means to deal with the problem (American Psychological Association [APA], 2020). Previous research hasn't paid sufficient attention to how resilience affects the link between job insecurity and stress during times of fast technological change. This study looks at whether resilience can help reduce the stress caused by job insecurity.

LITERATURE & HYPOTHESES

Role of Job Insecurity on Stress

Scholarly interest in job insecurity began over three decades ago with the influential publication by Greenhalgh and Rosenblatt (1984). In this foundational work, the authors aimed to consolidate existing research on the causes, consequences, and nature of job insecurity. Building on this foundation, Vander Elst and colleagues (2014) describe job insecurity as an unwanted possibility of losing one's current job in the future, along with the related fears or concerns about this potential job loss. This suggests that people experience job insecurity in their own personal way (Sverke et al., 2002), and it's something they don't choose (De Witte, 2005; Greenhalgh & Rosenblatt, 1984; Sverke et al., 2002). It affects both how they think and how they feel. A thorough review of the research on job insecurity reveals a general consensus among scholars that it is essentially a subjective experience. This subjectivity arises from how individuals perceive and interpret their actual work situation. Even similar objective circumstances can lead to varying levels of uncertainty among employees, depending on how they understand their environment (Klandermans & Vuuren, 1999; Sverke et al., 2002).

Also, it was found that employees who feel their job is not secure don't want to quit on their own. Instead, they're worried about being fired or losing the good benefits that come with the job (Sverke et al., 2002). It is pertinent to note here

that those employees who are working on temporary basis or those who chose to work on temporary contractual arrangement are not affected by job insecurity. Employees engaged in contractual arrangement are not affected by job insecurity because they do not feel that there is any breach of contract with the employer in the event of losing the job or in anticipation of losing the job and its benefits. In summary, temporary workers typically do not expect job security. Therefore, those employed under contractual agreements are less impacted by feelings of job insecurity (Vander Elst et al., 2014). On the other hand, permanent employees see job security as a key promise from their employer in return for their loyalty. When they feel their job might be at risk, they believe this promise has been broken, which makes them feel more insecure about their job.

Feeling of insecurity about future possibility of job loss is the central component of job insecurity experience. Huang et al. (2012) have clearly and precisely distinguished between cognitive and emotional job insecurity. Huang et al. (2012) defined cognitive and affective job insecurity as "awareness of the possibility of job or benefit loss; affective job insecurity is the emotional experience of being worried or emotionally distressed about these potential losses" (p.752). In simple terms, cognitive job insecurity indicates an employee's thinking or awareness that there is probability of losing the current job or its benefits whereas affective job insecurity reflects the worries and emotional reactions resulting out of the threats of probable chance of losing the job. De Witte (2005) argues that even though there is a subtle theoretical difference between cognitive job insecurity and affective job insecurity in the job insecurity experience, however, both the components are intertwined while employees experience job insecurity as a whole. De Witte (2005) argues that simply being aware of or considering the possibility of losing one's job leads to anxiety,

making employees emotionally sensitive to the negative effects of job insecurity.

De Witte (2005) divided the reasons for feeling unsure about a job into three groups: big-picture factors, personal background, and personality traits. Big-picture factors are things like the overall economy, how many people are unemployed in an area or country, and changes happening in a company. Individual background traits refer to demographic and job-related aspects such as an employee's age, tenure, and position within the company, these are considered objective factors. Personality traits, like how much control someone feels they have and how often they feel negative emotions, affect how they see job insecurity. This means feeling insecure about a job is more about how a person feels than the actual situation. Since these traits differ among people, they impact perceptions of job insecurity in several ways.

Researchers have also found some personal things that affect job insecurity. These include work values, how people explain events (attribution styles), the need for stability, and whether they feel in control of their lives (locus of control), perceived job significance, and feelings of powerlessness when facing potential job loss (Mauno et al., 2001; Elst et al., 2011). These factors act as intermediaries in shaping overall understandings of job insecurity. Essentially, job insecurity is an individual's perception of the chance of losing their job, which can vary greatly from one person to another (Shoss, 2017). It is subjective and not always tied to actual risk (Shoss, 2017). Stress arises when people feel they lack the resources to handle challenges (Lazarus & Folkman, 1984), and it depends on cognitive appraisal. Coping strategies and personality traits influence how stress is experienced (Costa & McCrae, 1990). When individuals struggle to cope with job insecurity, it can heighten stress, making effective coping crucial in managing its psychological impact.

Hypothesis 1. Individuals experiencing job insecurity will also experience stress.

Moderating role of Resilience.

Most research on resilience come from clinical psychology. The first study of resilience started in the 1970s. Researchers were surprised to see that some children who faced long-term stress did not have problems growing up (Garmezy, 1971, Werner & Smith 1982). These surprising results made researchers curious to learn what helps people stay strong mentally. Garmezy's 1971 study about children with parents who had schizophrenia is very important in resilience research. Masten and Reed (2002) studied teenagers who did well and stayed strong even when they faced immense problems. They say that people who are resilient can handle tough times and risks better. The idea of resilience as a personal strength has been extended. Researchers from different fields have looked at how resilience works at work. Studies from psychology show that resilience is important and useful in work settings. According to Luthans (2002a), resilience at work means being able to bounce back from hard times, conflicts, failures, or even from good things like progress and more responsibilities. Also, Fredrickson and Joiner (2002) found that resilience helps people grow emotionally in a positive way.

Luthans (2002a) also emphasizes that resilience encompasses the capacity to manage both challenges and positive developments. Scholars such as Fredrickson and Joiner (2002) and Richardson (2002) assert that resilience involves adaptive responses to both negative and positive experiences. Additionally, resilience has been shown to be a valid and measurable psychological construct, as supported by research from Block and Kremen (1996) and Wagnild and Young (1993).

The scientific study on the protective factors of resilience is a paradigm shift in resilience research (Jessor, 1993). Resilience protective

factor refers to those factors and circumstances that positively moderates the negative effects of risk and helps an individual to successfully adopt to the given situation (Masten, 1994). Werner (1993) categorized protective factors into within individual factors (outgoing, active, autonomous, positive self-concepts), in family factors (close bond emotionally stable parent), and in community factors (support from peers and elders). These factors in combinations help individuals to successfully adopt to challenging situations.

Risk factors also refers to “vulnerability factors” (Kirby & Fraser, 1997), Drug abuse, alcoholism (Sandau-Beckler et al., 2002), experiencing violence (Qouta et al., 2001), continuous exposure to stressful event and experiencing burnout (Baron et al., 1996; Smith & Carlson, 1997), unemployment, under education, and poor health (Collins, 2001) are the major risk factors that make an individual susceptible to poor adaptation in challenging circumstances and inhibit people from displaying resilience. It’s important to understand that just having risk factors doesn’t always mean things will go wrong. In fact, dealing with risk factors can help people become stronger and more resistant to problems. Cowan and colleagues (1996) explain this by saying that the real issue isn’t the risk itself, but how the risk leads to problems through certain processes. They compare this to getting small doses of a disease through vaccines, which helps build resistance to that disease. So, when risks are correctly identified and managed using the right resources, people can better handle tough situations. Resilience, a key psychological strength, enables individuals to adapt and recover from setbacks (Masten & Reed, 2002; Coutu, 2002). In today’s volatile work environment, such adaptability is vital for success. As job insecurity is dynamic and can be addressed through interventions (Abildgaard et al., 2018), resilience may buffer its negative impact. The Conservation of

Resources theory (Hobfoll, 1989) posits that mental strengths, like resilience, can help protect people from stress at work. Conceptual model (Figure 1).

Hypothesis 2. Resilience will weaken the connection between job insecurity and stress, especially for those individuals with high resilience.

METHODOLOGY

Sample and procedure

This study was conducted on a sample of 258 respondents belonging to three large information technology companies operating in eastern part of India. Currently Indian IT sector is facing unprecedented intense competitions. Indian IT companies are increasingly resorting to cost optimizations measures in shape of workforce downsizing measures. This study included 249 male and 9 female respondents. The age of respondents ranges from 26 to 49 years. Work experience of the respondents ranged from 5 to 18 years. Majority of respondents (74 %) had graduate degrees and rest 26 % of the respondents had post graduate degrees. To reduce common method bias, confidentiality was ensured, following Podsakoff et al. (2003).

MEASURES

Job insecurity was measured using a set of 4 questions from Vander Elst et al. (2014). The set of questions was reliable, showing a Cronbach’s alpha of .834. One example item from this scale is: “I feel insecure about the future of my job.” Stress symptoms were evaluated using a stress symptom scale developed by Lovibond and Lovibond (1995). Seven items from this scale were selected, and responses were recorded. One example item from this scale is: “I found it difficult to relax.” The scale showed a Cronbach’s alpha of 0.837. Resilience was measured using the Wagnild and Young (1993)

scale. The scale showed a Cronbach's alpha of 0.848.

RESULTS AND DISCUSSION

The primary aim of this study was to examine the moderating role of resiliency on the relationship between job insecurity and stress. Study hypotheses were examined with the help of correlation, regression, and structural equation modeling (Joreskog & Sorbom, 1993). We posited in Hypothesis 1 that individuals experiencing job insecurity will also be experiencing stress. As evident in Table 1, job insecurity shared significant association with stress ($r = .503$, $p < 0.01$). It can be observed in Table 2 that job insecurity predicated stress with

($\beta = .030$, $p < .01$) path estimate. These results suggest that hypothesis 1 is supported. Further, it was proposed in Hypothesis 2 that resiliency would be negatively correlated to stress. As seen in Table 1 that resiliency shared a negative association with stress ($r = -.204$, $p < 0.01$). Therefore, hypothesis 2 is also supported. We assumed in hypothesis 3 that resiliency would moderate the strength of the relationship between job insecurity and stress. As can be seen from the path estimates in Table 2, resiliency moderated the strength of the relationship between job insecurity and stress ($\beta = -.023$, $p < 0.01$). Further, as depicted in Figure 2, levels of resiliency moderated the strength of the relationship between job insecurity and stress. Given these findings hypothesis 3 is supported.

Tables1. Descriptive statistics and correlations.

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Respondent Age	35.48	6.488								
2. Education	3.2713	.47098	-.135*							
3. Gender	.03	.184	-.016	.025						
4. Work experience	10.80	8.259	.967**	-.136*	-.026					
5. Social desirability	.3140	.46500	.060	.000	.008	.057				
6. Job insecurity	.0194	.13812	.047	.038	-.027	.034	.026			
7. Stress	.0126	.10843	.064	.009	-.022	.098	-.002	.503**		
8. Resilience	4.7710	.55935	-.032	.037	.084	-.028	.011	-.148*	-.204**	

Note: * $p < .05$; ** $p < .01$

Table 2. Moderating model path estimates

Predictor	Path	Outcome	Estimate	S.E.	C.R.	P
Job Insecurity	→	Stress	.030	.006	5.488	**
Resilience * Job insecurity	→	Stress	-.023	.002	-9.600	**

Note: ** $p < .01$

Figure 1. Hypothesized model (Authors own source)

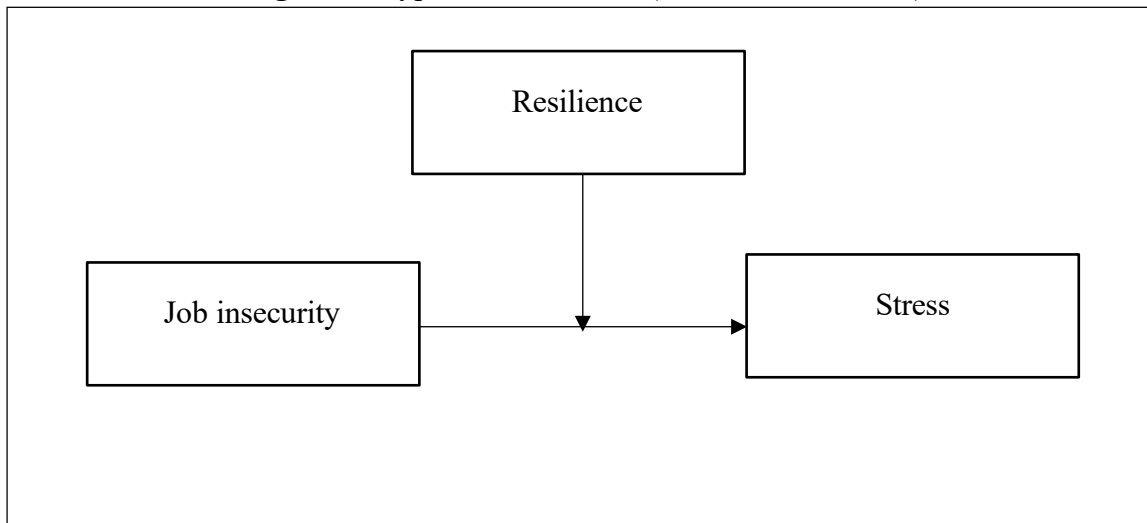
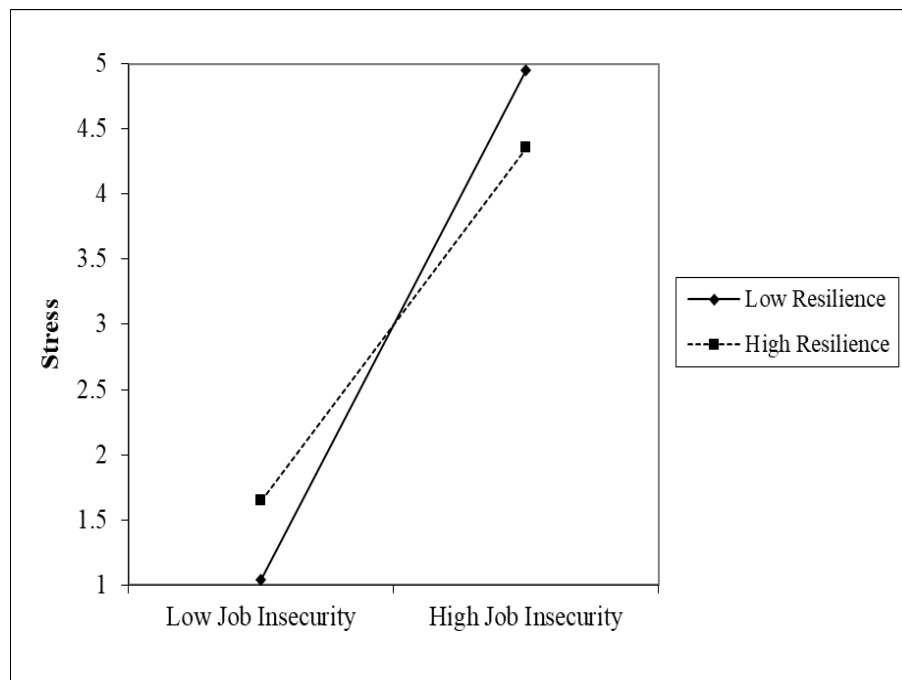


Figure 2. Moderating effect



This research shows that the resiliency, which was first studied in Western cultures, is also true in other cultures. The study found that resiliency helps people handle job insecurity and stress, even in non-Western settings. It suggests that being resilient can reduce how much stress and job insecurity perception. Helping workers become more resilient at work can lower their stress and improve their performance, job satisfaction, and willingness to help others in the organization.

Limitations and scope

This study was based on a sample of 258 participants working in the IT sector. Further, studies could be conducted with a larger sample involving respondents from service and manufacturing to demonstrate enhanced generality of findings. Furthermore, this study design was cross-sectional in nature. Therefore, absolute causality cannot be ascertained. Therefore, additional studies employing longitudinal and experimental designs may be conducted to evaluate the causal relationships of stress, job insecurity, and resilience.

Theoretical implications

Resilience can be developed through interventions (Luthans et al., 2017). As it helps reduce stress, HR professionals can implement resilience-building strategies to boost performance, well-being, job satisfaction, and retention. By checking how resilient employees are, how worried they feel about their jobs, and how stressed they are, these initiatives will help create a positive work environment. This can help keep employees healthy and reduce the negative feelings caused by job insecurity. The findings of this study suggest theoretical and managerial implications. Survey of resiliency literature depicts that resiliency can be increased through appropriate interventions (Luthans et al., 2017). Theoretically, drawing on the insights

from this study in terms of the moderating influence of resiliency in diminishing the influence of job insecurity on stress, further experimental studies aiming at examining the impact of resiliency on stress can be attempted in future to establish causality.

Managerial Implications

In terms of managerial implications, as this study found that resiliency had a favorable influence on decreasing stress, human resource professions can use this understanding to implement resiliency interventions to reduce stress in workforce. Increase in resiliency is likely to motivate employees for higher performance and would eventually enhance workforce well-being. Moreover, enhancement in resiliency can help to enhance job satisfaction and also would help in retention of talented employees. As resiliency significantly decreases the detrimental influence of job insecurity on stress, in these lines, psychometric assessment of resiliency, job insecurity and stress can be conducted to assess the improvement areas needed to foster the overall employee well-being. Existing research on resiliency indicates that it positively impacts work outcomes, so human resource professionals can leverage this understanding to encourage employees to become resilient, and aid in supporting employees for long-term organizational growth.

CONCLUSION

Work-related stress and job insecurity are significant issues in the modern work environment. Our study shows that resilience can help reduce stress. These challenges are widespread in today's rapidly changing workplace, and their prevalence, along with the resulting impacts, pose serious challenges for today's organizations. Our research demonstrated that people's resilience, as a positive psychological resource, diminishes the influence

of job insecurity on stress perceptions in work settings. Our research findings, in particular, showed that individuals experiencing higher levels of resiliency experience less stress. Therefore, efforts towards nurturing and maintaining resilience in the workplace would assume great significance for management practitioners.

REFERENCES

- Abildgaard, J. S., Nielsen, K., & Sverke, M. (2018). Can job insecurity be managed? Evaluating an organizational-level intervention addressing the negative effects of restructuring. *Work & Stress*, 32(2), 105-123.
- APA (2020). <https://www.apa.org/helpcenter/work-stress> Accessed 04 March 2020
- Baron, L., Eisman, H., Scuello, M., Veyzer, A., & Lieberman, M. (1996). Stress resilience, locus of control, and religion in children of Holocaust victims. *The Journal of psychology*, 130(5), 513-525.
- Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70(2), 349-361.
- Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(5), 46–55.
- Costa, P. T., Jr., & McCrae, R. R. (1990). Personality: Another “hidden factor” in stress research. *Psychological Inquiry*, 1(1), 22–24.
- Collins, M. E. (2001). Transition to adulthood for vulnerable youths: A review of research and implications for policy. *Social service review*, 75(2), 271-291.
- Cowan, P. A., Cowan, C. P., & Schulz, M. S. (1996). Thinking about risk and resilience in families. In E. M. Hetherington & E.A. Blechman (Eds.), *Stress, coping, and resiliency in children and families* (pp. 1-38). Mahwah, NJ: Erlbaum.
- De Witte, H. (2005). Job insecurity: Review of the international literature on definitions, prevalence, antecedents and consequences. *SA journal of Industrial Psychology*, 31(4), 1-6.
- De Witte, H., & Näswall, K. (2003). Objective' vs subjective' job insecurity: Consequences of temporary work for job satisfaction and organizational commitment in four European countries. *Economic and industrial democracy*, 24(2), 149-188.
- De Cuyper, N., & De Witte, H. (2006). The impact of job insecurity and contract type on attitudes, well-being and behavioural reports: A psychological contract perspective. *Journal of occupational and organizational psychology*, 79(3), 395-409.
- De Cuyper, N., & De Witte, H. (2008). Volition and reasons for accepting temporary employment: Associations with attitudes, well-being, and behavioural intentions. *European Journal of Work and Organizational Psychology*, 17(3), 363-387.
- Elst, T. V., De Cuyper, N., & De Witte, H. (2011). The role of perceived control in the relationship between job insecurity and psychosocial outcomes: moderator or mediator?. *Stress and Health*, 27(3), e215-e227.
- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13(2), 172-175.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management review*, 9(3), 438-448.
- Garmezy, N. (1971). Vulnerability research

- and the issue of primary prevention. *American Journal of Orthopsychiatry*, 41(1), 101-116.
- Huang, G. H., Niu, X., Lee, C., & Ashford, S. J. (2012). Differentiating cognitive and affective job insecurity: Antecedents and outcomes. *Journal of Organizational Behavior*, 33(6), 752-769.
 - Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524.
 - Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. *American Psychologist*, 48(2), 117-126.
 - Johnson, K., Bryant, D. D., Collins, D. A., Noe, T. D., Strader, T. N., & Berbaum, M. (1998) Preventing and reducing alcohol and other drug use among high-risk youths by increasing family resilience. *Social Work*, 43(4), 297-308.
 - Joreskog, K.G. & Sorbom, D. (1993), *LISREL 8 User's Reference Guide*, Scientific Software, Chicago, IL
 - Kessler, S. (2023). The A.I. Revolution Will Change Work. Nobody Agrees How. *The New York Times*: June. <https://www.nytimes.com/2023/06/10/business/ai-jobs-work.html#> Accessed 02 October 2024.
 - Klandermans, B., & Van Vuuren, T. (1999). Job insecurity: introduction. *European Journal of Work and Organizational Psychology*, 8(2), 145-153.
 - Luthans, F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23(6), 695–706.
 - Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual review of organizational psychology and organizational behavior*, 4(1), 339-366.
 - Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.
 - Masten, A. S., & Reed, M. G. J. (2002). Resilience in development. In C. R. Snyder, & S. Lopez (Eds.), *Handbook of positive psychology*: 74–88. Oxford, U.K.: Oxford University Press.
 - Masten, A. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3-25). Hillsdale, NY: Lawrence Erlbaum.
 - Masten, A. S., & Reed, M. G. J. (2002). Resilience in development. In C. R. Snyder, & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 74–88). Oxford, U.K.: Oxford University Press.
 - Mauno, S., Leskinen, E., & Kinnunen, U. (2001). Multi-wave, multi-variable models of job insecurity: Applying different scales in studying the stability of job insecurity. *Journal of Organizational Behavior*, 22(8), 919–937.
 - Podsakoff, P. M., MacKenzie, S. C., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
 - Qouta, S., El-Sarraj, E., & Punamäki, R. L. (2001). Mental flexibility as resiliency factor among children exposed to political violence. *International Journal of Psychology*, 36(1), 1-7.
 - Richardson GE. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307–321.
 - Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: a meta-analysis and review of job insecurity and its

- consequences. *Journal of Occupational Health Psychology*, 7(3), 242-264.
- Sandau-Beckler, P. A., Devall, E., & de La Rosa, I. A. (2002). Strengthening family resilience: Prevention and treatment for high-risk substance-affected families. *Journal of Individual Psychology*, 58(3), 305-327.
 - Shoss, M. K. (2017). Job insecurity: An integrative review and agenda for future research. *Journal of Management*, 43(6), 1911-1939.
 - Smith, C., & Carlson, B. E. (1997). Stress, coping, and resilience in children and youth. *The Social service review*, 71 (2), 231-256.
 - Vander Elst, T., De Witte, H., & De Cuyper, N. (2014). The Job Insecurity Scale: A psychometric evaluation across five European countries. *European Journal of Work and Organizational Psychology*, 23(3), 364-380.
 - Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the resiliency scale. *Journal of Nursing Measurement*, 1(2), 165-178.
 - Werner, E. E., & Smith, R. S. (1982). *Vulnerable but not invincible: A longitudinal study of resilient children and youth*. New York, NY: R. R. Donnelley and Sons, Inc.
 - Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai Longitudinal Study. *Development and psychopathology*, 5(4), 503-515.
 - World Health Organization (2024, September 2). Mental health at work. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work> Accessed 16 September 2025