



Self-Resilience and Perceived Stress Among Generation Z in Semarang

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Abstract. This study examined the relationship between self-resilience and perceived stress among Generation Z in Semarang City. A quantitative correlational design with a cross-sectional survey approach was employed. The study involved 70 Generation Z participants who lived, studied, or worked in Semarang City. Self-resilience was measured using the Connor-Davidson Resilience Scale 25 (CD-RISC 25), while perceived stress was assessed using the Perceived Stress Scale 10 (PSS-10). Data were analyzed using SPSS 26 through descriptive statistics, validity and reliability tests, normality testing, and Pearson product-moment correlation. The results showed a significant negative relationship between self-resilience and perceived stress ($r = -0.630$; $p = 0.000$), indicating that higher self-resilience was associated with lower perceived stress. These findings suggest that self-resilience is an important psychological resource for helping Generation Z cope with academic, occupational, social, and urban life pressures.

Keywords: *generation z; perceived stress; self-resilience*

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Introduction

Generation Z is entering adulthood within a measurable global context of mental-health risk, labor-market uncertainty, and intensive digital exposure. The World Health Organization reports that one in seven people aged 10-19 years experiences a mental disorder, representing 15% of the global burden of disease in that age group, and suicide is the third leading cause of death among people aged 15-29 years (World Health Organization, [2025](#)). Economic transition also creates pressure because the International Labour Organization reported that 20.4% of young people worldwide were not in employment, education, or training in 2023 (International Labour Organization, [2024](#)). In parallel, digital interaction has become a major social environment, with 5.24 billion social media user identities recorded globally in 2025 (Kemp, [2025a](#)). These data show that stress among young people cannot be reduced to an individual weakness; it is shaped by overlapping educational, occupational, social, and digital demands.

The Indonesian context gives the issue stronger empirical relevance. At the start of 2025, Indonesia had 212 million internet users and 143 million social media user identities (Kemp, [2025b](#)). UNICEF Indonesia ([2024](#)) also reported that approximately one-third of Indonesian adolescents, or about 15.5 million people, faced mental-health challenges, while about one in twenty adolescents, or 2.45 million people, were affected by mental disorders. Although these estimates focus mainly on adolescents, they remain relevant to Generation Z because many members of this cohort are currently moving from late adolescence into higher education, first employment, financial responsibility, and early adult identity formation.

Secondary data from BPS-Statistics Semarang Municipality further justify the local focus of this study. In 2024, Semarang had 1,708,833 residents and a population density of 4,571.76 people per square kilometer. The 15-29 age groups accounted for approximately 385.359 residents, calculated from the 15-19, 20-24, and 25-29 age-group categories in the 2024 population projection (BPS-Statistics Semarang Municipality, [2025](#)). These figures indicate that Semarang contains a substantial youth and young-adult population living in a dense urban setting, where education, employment, family expectations, peer comparison, and digital life can intersect in daily experience.

Generation Z is often described as a cohort that grows inside rapid social change, continuous online visibility, and uncertain educational or career pathways. This condition makes their psychological life different from older cohorts because pressure can come from school, work, family expectations, peer comparison, and digital exposure at the same time. Recent studies show that Generation Z faces distinctive challenges related to resilience, changing values, crisis

experience, and well-being in modern social environments (Ang et al., [2021](#); Harari et al., [2023](#)). Indonesian evidence also suggests that Gen Z well-being is shaped by both internal strengths and external pressures, so this group needs to be studied through a contextual psychological lens (Dwidienawati et al., [2025](#); Fitriana & Malahati, [2024](#)).

The transition from late adolescence to early adulthood is a critical period for perceived stress. At this stage, many young people begin to make decisions about higher education, employment, relationships, financial independence, and future identity. Studies on young adults show that academic pressure, career uncertainty, social adjustment, and repeated life demands can increase psychological strain when personal resources feel insufficient (Barbayannis et al., [2022](#); Gong et al., [2023](#)). Indonesian student studies also indicate that stress and resilience are important variables for understanding how young adults manage academic and personal demands (Muin et al., [2025](#); Pratama & Tondok, [2023](#)).

In an urban context, psychological pressure does not appear only as an individual problem. Urban life may combine mobility, job competition, financial pressure, digital comparison, and social expectations into one daily experience. Stress is therefore better understood as an interaction between external demands and personal appraisal rather than as a simple count of difficult events (Cohen et al., [2019](#); Lazarus & Folkman, [1984](#)). For Generation Z in Semarang City, this means that similar daily demands may produce different stress levels depending on how individuals evaluate control, support, and coping capacity.

Perceived stress is relevant because it focuses on how individuals evaluate their life situations. A person may face many demands but experience lower stress when those demands are appraised as controllable, meaningful, or still within personal capacity. Contemporary stress literature emphasizes subjective appraisal, perceived control, and available coping resources as central elements of psychological stress (Cohen et al., [2019](#); Soria-Reyes et al., [2023](#)). This perspective is suitable for Generation Z research because daily pressure may arise from multiple sources, but the meaning given to those pressures determines how stressful they become (Hakim et al., [2024](#); Barbayannis et al., [2022](#)).

Self-resilience is also relevant because it describes the ability to adapt, continue functioning, and recover when individuals face obstacles or uncertainty. Resilience is not merely a fixed personal trait; it can be shaped by emotional regulation, social support, meaning-making, previous experience, and environmental resources. Current resilience theory views resilience as a dynamic process involving personal and social systems (Southwick et al., [2014](#); Ungar & Theron, [2020](#)). Empirical studies also show that resilient young adults tend to use more adaptive coping

styles and experience better psychological adjustment under pressure (Wu et al., [2020](#); Ansari & Iqbal, [2025](#)).

The relationship between self-resilience and perceived stress can be explained through the logic of appraisal. When individuals view a problem as impossible to manage, the same event may become more stressful than when it is seen as difficult but still manageable. Transactional stress theory explains that coping resources influence how individuals evaluate and respond to stressors (Lazarus & Folkman, [1984](#); Cohen et al., [2019](#)). In this framework, self-resilience is expected to reduce perceived stress because resilient individuals have stronger psychological resources for interpreting pressure and choosing adaptive responses (Pratama & Tondok, [2023](#); Gong et al., [2023](#)).

The conservation of resources perspective further explains why resilience matters for Generation Z. This perspective argues that stress increases when people lose resources, anticipate resource loss, or fail to gain resources after investing effort. For young adults, resources may include confidence, emotional stability, social support, time, money, academic opportunity, and a sense of control (Hobfoll, [1989](#)). Research shows that resilience and social support can protect young people from stronger psychological distress when stressful experiences occur (Ye et al., [2020](#)). Recent findings also indicate that psychological resources are closely connected to stress and mental-health outcomes among university students (Fang et al., [2025](#); Ansari & Iqbal, [2025](#)).

Previous studies have established that resilience is generally related to lower stress, but the context of that relationship still requires clearer interpretation. Ansari and Iqbal (2025) found a negative association between stress and resilience among college students, while Gong et al. ([2023](#)) showed that psychological resilience was related to learning stress and burnout. Indonesian studies have also examined perceived stress, resilience, and coping among student populations (Muin et al., [2025](#); Pratama & Tondok, [2023](#)). However, these studies do not fully explain the relationship among Generation Z individuals in a local Indonesian urban context with mixed roles as students, workers, and young adults in transition.

Research on Generation Z also remains concentrated in specific crisis, campus, or occupational contexts. Ang et al. ([2021](#)) and Harari et al. ([2023](#)) examined Generation Z in relation to pandemic and crisis conditions, while Lubis et al. ([2024](#)) and Sofiah and Puspasari ([2025](#)) focused on occupational outcomes among Gen Z workers. These studies are valuable, but they leave space for a more direct examination of self-resilience and perceived stress in everyday urban life after the acute pandemic period, particularly in Indonesian cities such as Semarang.

Recent studies on stress and resilience largely focus on university students, health-related student groups, or specific workers, leaving fewer investigations into Generation Z as a broader urban cohort. Semarang City provides a relevant setting to examine self-resilience and perceived stress in young adults who navigate diverse daily roles, including living, studying, and working (Dwidienawati et al., 2025; Muin et al., 2025). Research also varies in how self-resilience is positioned within study models sometimes as a predictor, a moderator, or part of a broader well-being construct which can obscure the fundamental question of whether higher self-resilience directly corresponds to lower perceived stress. Employing a focused correlational design allows for a clear assessment of this relationship without introducing additional variables that could dilute the effect (Schober et al., 2018; Wang & Cheng, 2020).

The practical application of local evidence is equally important. Mental-health discussions often recommend resilience training, stress management, or peer support, yet programs are more effective when based on data from the target population. Systematic reviews indicate that resilience-based interventions can support student and adolescent mental health, but contextual evidence remains necessary to guide intervention planning in specific settings. Evidence from Generation Z in Semarang City can therefore assist universities, workplaces, and community organizations in determining whether resilience should be prioritized in stress-prevention programs (Abulfaraj et al., 2024; Llistosella et al., 2023).

The novelty of this study lies in its local urban focus and its direct variable relationship. Rather than treating Generation Z only as a national demographic label, this study places Gen Z within Semarang City as a concrete social setting. The study also includes individuals who live, study, or work in the city, so the population is not restricted to one academic program or one workplace category. This approach allows a clearer test of whether self-resilience is significantly related to perceived stress among Gen Z respondents in a local Indonesian urban context.

The objective of this study is to examine the relationship between self-resilience and perceived stress among Generation Z in Semarang City. More operationally, the study aims to determine whether self-resilience is significantly and negatively associated with perceived stress among respondents who live, study, or work in the city. Based on the theoretical framework and previous findings, the hypothesis of this study is that self-resilience has a significant negative relationship with perceived stress among Generation Z in Semarang City. Higher self-resilience is expected to be associated with lower perceived stress, while lower self-resilience is expected to be associated with higher perceived stress.

Methods

This study used a quantitative correlational design with a cross-sectional survey approach. The design was selected because the purpose of the study was to test the statistical relationship between self-resilience and perceived stress without manipulating either variable. Correlational analysis is appropriate when researchers need to estimate the direction and strength of association between two psychological variables (Schober et al., [2018](#); Wang & Cheng, [2020](#)). A cross-sectional approach is also suitable because the data were collected at one point in time to describe the current psychological pattern of the target population (Setia, [2016](#); Wang & Cheng, [2020](#)).

The use of a survey design allowed the researcher to reach respondents who were spread across educational, occupational, and community networks in Semarang City. Online surveys are efficient for collecting data from digitally active young adults, but they require clear eligibility screening, complete instructions, and attention to response quality (Andrade, [2020](#); Regmi et al., [2016](#)). Recent methodological discussions also emphasize that online questionnaire quality depends on careful design, respondent attention, and transparent reporting of procedures (Jaeger & Cardello, [2022](#); Zimba & Gasparyan, [2023](#)). For that reason, the questionnaire was arranged in a structured sequence so that respondents understood the purpose, consent process, and response requirements before submitting their answers.

The participants were 70 members of Generation Z aged 17-27 years who lived, studied, or worked in Semarang City. This age range was selected because it represents young people who are entering higher education, early employment, or early adulthood roles. Research on Generation Z shows that this group often faces stress related to education, work preparation, social comparison, and changing values (Ang et al., [2021](#); Harari et al., [2023](#)). Indonesian studies also indicate that young adults need to be examined through both internal resources and contextual pressures (Dwidienawati et al., [2025](#); Muin et al., [2025](#)).

The study used purposive sampling because respondents had to meet specific criteria related to age, location, comprehension of the questionnaire, and willingness to participate. The inclusion criteria were being 17-27 years old, living, studying, or working in Semarang City, understanding Indonesian questionnaire items, and agreeing to informed consent. Nonprobability sampling is acceptable in social and psychological surveys when the target population has specific characteristics, as long as the limitations are reported transparently (Stratton, [2021](#); Andrade, [2020](#)). Sampling decisions should also consider whether the number of

respondents is adequate for the planned statistical analysis and interpretation of correlation results (Kang, 2021; Bujang, 2024).

Self-resilience was measured using the Connor-Davidson Resilience Scale 25, which contains 25 items rated on a five-point Likert scale. The scale assesses resilience as a multidimensional psychological capacity involving competence, adaptability, control, tolerance of negative affect, secure relationships, and meaning. Examples of paraphrased item content include the ability to adapt when change occurs and the tendency to continue functioning after pressure or failure. The original scale was developed to measure resilience in relation to stress and adaptation (Connor & Davidson, 2003), and Indonesian research has used the scale in local health and psychological contexts (Ningsih et al., 2023).

Perceived stress was measured using the Perceived Stress Scale 10 (PSS-10). The scale assesses the extent to which respondents perceive recent life situations as unpredictable, uncontrollable, or overloaded. The PSS-10 uses a five-point response format, and several items require reverse scoring because they reflect perceived control or coping capacity. Examples of paraphrased item content include feeling that important things in life are difficult to control and feeling confident in handling personal problems. The PSS-10 is widely used because it measures subjective stress appraisal rather than only counting stressful events (Cohen et al., 1983; Cohen et al., 2019). Indonesian psychometric evidence also supports the use of the PSS-10 for examining perceived helplessness and perceived self-efficacy dimensions (Hakim et al., 2024).

Before the main correlation analysis, the quality of the instruments was examined in the present sample. Item validity was tested using corrected item-total correlation, and internal consistency was tested using Cronbach's alpha. For the CD-RISC 25, all 25 items were valid, with corrected item-total correlation values ranging from 0.885 to 0.951. For the PSS-10, all 10 items were valid, with corrected item-total correlation values ranging from 0.916 to 0.948. Therefore, all items from both instruments were retained for the subsequent analysis.

The reliability analysis showed that both instruments had high internal consistency. The CD-RISC 25 obtained a Cronbach's alpha of 0.933, while the PSS-10 obtained a Cronbach's alpha of 0.987. These values indicate that both instruments were reliable in the present sample. However, the very high alpha value of the PSS-10 should be interpreted carefully because very high internal consistency can also indicate strong item similarity or sample homogeneity.

Data were collected through Google Forms using a questionnaire link distributed through social media, student networks, work-related networks, and community groups in Semarang City. The form began with informed consent, followed by demographic questions and the research

scales. Online questionnaire studies need clear instructions and a logical question order so that respondents can understand what they are answering (Regmi et al., [2016](#); Zimba & Gasparyan, [2023](#)). The procedure also followed recommendations for online survey quality by requiring complete responses and screening respondents according to eligibility criteria (Andrade, [2020](#); Jaeger & Cardello, [2022](#)).

Before completing the form, respondents were informed that participation was voluntary and that their responses would be used only for research purposes. They were also told that they could stop before submitting the form if they did not want to continue. Ethical online research requires transparency, privacy protection, and clear consent, especially when the topic is related to psychological stress (Andrade, [2020](#); Regmi et al., [2016](#)). Such procedures help reduce potential discomfort and strengthen the ethical accountability of self-report psychological research (Barbayannis et al., [2022](#); Zimba & Gasparyan, [2023](#)).

The data were analyzed using SPSS 26. The analysis began with data checking, coding, reverse scoring for relevant PSS-10 items, calculation of total scores, and descriptive statistics for demographic and research variables. Descriptive statistics are needed because they show the sample profile and the basic distribution of scores before inferential analysis is interpreted (Kaur et al., [2018](#); Mishra et al., [2019](#)). This step also helps readers understand whether the respondents reflect the intended Gen Z population in Semarang City (Stratton, [2021](#); Andrade, [2020](#)).

After descriptive analysis, validity and reliability tests were conducted for the research instruments. Corrected item-total correlation was used to examine item validity, while Cronbach's alpha was used to examine internal consistency. These procedures are commonly used in social and behavioral research to evaluate whether scale items function consistently in the sample (Boateng et al., [2018](#); Taber, [2018](#)). Instrument quality testing was necessary because the main correlation analysis would be more meaningful when both variables were measured with acceptable internal consistency (Schober et al., [2018](#); Mishra et al., [2019](#)).

Normality testing was conducted before deciding the main correlation technique. If both variables were normally distributed, Pearson product-moment correlation was used; if the normality assumption was not met, Spearman rank-order correlation was considered. Statistical guidelines recommend that researchers choose correlation methods according to data characteristics and measurement assumptions (Schober et al., [2018](#); Mishra et al., [2019](#)). This decision rule was used to ensure that the analysis matched the structure of the collected data rather than applying a statistical test mechanically (Wang & Cheng, [2020](#); Kang, [2021](#)).

This study used anonymous self-report data and voluntary participation. The questionnaire did not ask for sensitive identifiers such as full address, national identity number, or private contact information. Ethical guidance for online surveys emphasizes that privacy, consent, and data protection should be explained clearly to respondents (Andrade, [2020](#); Regmi et al., [2016](#)). Because the topic involved stress, the study also treated respondent comfort as important and avoided forcing participants to continue after they had opened the form (Barbayannis et al., [2022](#); Zimba & Gasparyan, [2023](#)).

Results

Respondent Demographics

To provide a comprehensive overview of the study sample, demographic information of the respondents was analyzed and summarized. Understanding the demographic characteristics of participants is important for describing the composition of the sample and providing context for the interpretation of the research findings. The demographic profile includes respondents' age, gender, educational level, and employment status. The results are presented in Table 1.

Table 1.
Demographics frequency

Demographics	Frequency	Percentage
Age		
17 to 21 years	17	24.3%
22 to 27 years	53	75.7%
Gender		
Male	36	51.4%
Female	34	48.6%
Education Level		
Senior high school or equivalent	21	30.0%
Undergraduate student or bachelor's degree	33	47.1%
Postgraduate student or master's degree	16	22.9%
Employment Status		
Student	25	35.7%
Civil Servants	7	10.0%
Private Sector	23	32.9%
Others	15	21.4%

Based on the table above, the majority of participants were aged 22–27 years, comprising 53 participants (75.7%). In terms of gender, the proportion of male and female participants was relatively balanced, with 36 males (51.4%) and 34 females (48.6%). Regarding educational background, most participants held a bachelor's degree, accounting for 33 participants (47.1%). Finally, in relation to employment status, the largest groups consisted of students, with 25 participants (35.7%), followed by participants working in the private sector (32.9%).

Normality Test

The normality test was conducted to determine whether the data distribution met the assumptions for Pearson correlation. If the data are normally distributed, Pearson correlation will be used. If the data are not normally distributed, Spearman correlation will be used.

Table 2.
Normality Test of Self-Resilience and Perceived Stress

Variable	Sig.	Interpretation
CD-RISC 25	0.200	Normal
PSS-10	0.200	Normal

Table 2 shows the normality test results. The significance value for self-resilience was 0.20, while the significance value for perceived stress was 0.200. Since both significance values were greater than .05, the data met the normality assumption. Therefore, the correlation analysis used Pearson correlation.

Correlation Test Between Self-Resilience and Perceived Stress

Correlation analysis was conducted to examine the relationship between self-resilience and perceived stress among the respondents. The analysis aimed to determine both the direction and strength of the association between the two variables. Pearson's Product-Moment Correlation was employed to assess whether self-resilience is significantly related to perceived stress. The results of the correlation analysis are presented in Table 3.

Table 3.
Correlation Between Self-Resilience and Perceived Stress

Variable	N	Correlation Coefficient	Sig.	Interpretation
Self-Resilience and Perceived Stress	70	-0.630	0.000	Significant

Table 3 shows a significant negative relationship between self-resilience and perceived stress ($r = -0.630$, $p < 0.01$). This result supports the research hypothesis. The negative direction indicates that higher self-resilience is associated with lower perceived stress among Generation Z respondents in Semarang City. The coefficient also indicates a strong relationship, suggesting that resilience is meaningfully connected to how respondents appraise daily pressures.

Aspect-Based Correlation Test

In addition to examining the overall relationship between self-resilience and perceived stress, further analysis was conducted to explore the relationship between each dimension of resilience and perceived stress. This analysis aimed to identify which aspects of resilience are more strongly associated with individuals' perceived stress levels. Understanding these

relationships provides a more detailed perspective on the specific resilience factors that may contribute to stress reduction. The results of the correlation analysis are presented in Table 4.

Table 4.

Pearson Correlation Analysis of CD-RISC 25 Dimensions and Perceived Stress

CD-RISC 25 Aspect	r-Value	p-Value	Interpretation
Personal competence, high standards, and tenacity	-0.591	0.000	Significant
Trust in instincts and tolerance of negative affect	-0.634	0.000	Significant
Positive acceptance of change and secure relationships	-0.615	0.000	Significant
Control	-0.630	0.000	Significant
Spiritual influence	-0.632	0.000	Significant

As shown in Table 4, all dimensions of resilience demonstrate significant negative correlations with perceived stress ($p < 0.05$). Among the five dimensions, Trust in Instincts and Tolerance of Negative Affect exhibits the strongest negative correlation ($r = -0.634$), followed closely by Spiritual Influence ($r = -0.632$) and Control ($r = -0.630$). These findings indicate that higher levels of resilience across all dimensions are associated with lower levels of perceived stress among the respondents.

Discussion

This study found a significant negative relationship between self-resilience and perceived stress among Generation Z in Semarang City. The correlation coefficient of -0.630 indicates that respondents with higher self-resilience tended to report lower perceived stress. This result is consistent with meta-analytic evidence showing a negative association between stress and resilience among college students (Ansari & Iqbal, 2025). It also supports findings that psychological resilience is related to lower learning stress and burnout in young adult student populations (Gong et al., 2023).

The finding can be interpreted through the transactional theory of stress and coping. From this perspective, stress is not caused only by the presence of demands, but by the way individuals evaluate those demands and their available coping resources. Resilient individuals may experience lower stress because they are more able to interpret pressure as manageable and respond with adaptive coping strategies (Lazarus & Folkman, 1984; Cohen et al., 2019). This interpretation is also supported by Indonesian research showing that resilience influences the relationship between coping and perceived stress among students (Pratama & Tondok, 2023; Muin et al., 2025).

The result also supports the conservation of resources perspective. Resilience can be understood as an internal psychological resource that helps individuals protect themselves from feeling overwhelmed when other resources are threatened. Resource-based stress theory

explains that stress increases when people lose resources or perceive that important resources are unstable (Hobfoll, 1989; Ye et al., 2020). Recent evidence also shows that resilience and social support are closely related to stress and mental health outcomes among young adults (Fang et al., 2025; Ansari & Iqbal, 2025).

In relation to international studies, the present result confirms that the protective role of resilience is not limited to one cultural or educational setting. The negative correlation found in this study is similar to patterns reported in systematic and empirical studies involving university students and young adults (Ansari & Iqbal, 2025; Gong et al., 2023). However, this study adds a local urban context by focusing on Generation Z in Semarang City rather than only on students in a single academic program. This contribution is important because the strength and meaning of resilience may vary across population characteristics and social environments (Dwidienawati et al., 2025; Fang et al., 2025).

The finding is also consistent with Indonesian studies, but it contributes a more focused explanation. Muin et al. (2025) showed that resilience and perceived stress are relevant in Indonesian student populations, while Pratama and Tondok (2023) showed that resilience is important in the link between coping strategies and stress. The present study extends those findings by examining Generation Z in Semarang City with respondents who are not limited to one student subgroup. This wider local focus helps clarify that resilience is relevant not only in academic situations but also in broader early-adulthood contexts (Barbayannis et al., 2022; Dwidienawati et al., 2025).

The aspect-based analysis provides a more detailed explanation of the relationship between resilience and stress. The strongest negative relationship appeared in the aspect of trust in instincts and tolerance of negative affect, which suggests that emotional steadiness and confidence in handling difficult feelings are closely related to lower stress. This interpretation is consistent with resilience theory, which emphasizes emotional regulation and adaptive response under pressure (Southwick et al., 2014; Ungar & Theron, 2020). It also matches research showing that resilient individuals tend to use positive coping styles when facing stressors (Wu et al., 2020; Pratama & Tondok, 2023).

The control aspect also showed a strong negative relationship with perceived stress. This result suggests that respondents who feel more able to influence their responses may experience daily demands as less overwhelming. Perceived control is central in stress appraisal because people tend to feel more stressed when they see situations as uncontrollable (Cohen et al., 2019; Soria-Reyes et al., 2023). The finding also supports Indonesian psychometric evidence showing

that perceived helplessness and perceived self-efficacy are important components in understanding stress appraisal (Hakim et al., [2024](#); Pratama & Tondok, [2023](#)).

The spiritual influence aspect also had a significant negative relationship with perceived stress. In the Indonesian context, spirituality may support meaning-making, patience, hope, and emotional acceptance when individuals face difficulty. Resilience research recognizes that meaning systems and cultural resources can contribute to adaptive functioning, especially when individuals face uncertainty (Southwick et al., [2014](#); Ungar & Theron, [2020](#)). Indonesian studies also suggest that spiritual and cultural elements should be interpreted as part of broader coping resources rather than as a single explanation for psychological resilience (Ningsih et al., [2023](#); Setiawati et al., [2021](#)).

Positive acceptance of change and secure relationships also showed a significant negative association with perceived stress. This result suggests that flexibility and relational security help Generation Z manage unstable or changing situations. Studies on young people show that social support, coping, and resilience can reduce stress reactions and improve adjustment (Ye et al., [2020](#); Fang et al., [2025](#)). The result is also relevant for Generation Z because this cohort often navigates fast changes in education, work, digital interaction, and social expectations (Ang et al., [2021](#); Harari et al., [2023](#)).

Although personal competence, high standards, and tenacity had the weakest correlation among the resilience aspects, the relationship was still significant. This means that persistence and confidence remain important, but they may not be the only resources needed to reduce perceived stress. Resilience literature suggests that adaptation depends on multiple systems, including individual skills, social relationships, emotion regulation, and environmental support (Southwick et al., [2014](#); Ungar & Theron, [2020](#)). The result therefore warns against reducing resilience to personal toughness alone because stress among Gen Z is also shaped by social and contextual pressures (Dwidienawati et al., [2025](#); Barbayannis et al., [2022](#)).

The findings have practical implications for universities, workplaces, community organizations, and youth mental health programs in Semarang City. If self-resilience is related to lower perceived stress, prevention programs should strengthen emotional regulation, adaptive appraisal, problem solving, peer support, and help-seeking behavior. Systematic reviews show that resilience-based interventions can improve resilience and support mental health when they are designed carefully (Abulfaraj et al., [2024](#); Llistosella et al., [2023](#)). At the same time, resilience programs should not blame young people for their stress, because resilience works best when

supported by healthy social and institutional environments (Ungar & Theron, [2020](#); Fang et al., [2025](#)).

The local implication of this study is that Semarang-based institutions can use the findings as early evidence for stress prevention among Gen Z. Universities can provide resilience workshops, peer-support spaces, and stress management education, while workplaces can develop mentoring and adjustment support for young employees. Evidence from Indonesian and international studies shows that resilience, coping, and social support are relevant targets for mental health promotion among young adults (Muin et al., [2025](#); Pratama & Tondok, [2023](#)). Such programs should be adapted to the real pressures faced by Gen Z, including academic workload, career uncertainty, social comparison, and financial demands (Dwidienawati et al., [2025](#); Harari et al., [2023](#)).

This study has several limitations. First, the cross-sectional design cannot prove causality, so the result should be interpreted as a relationship between variables at one point in time. Cross-sectional studies are useful for identifying associations, but they cannot explain whether resilience reduces stress over time or whether lower stress strengthens resilience (Setia, 2016; Wang & Cheng, 2020). Second, the use of purposive sampling and online self-report data may limit generalizability and create response bias (Andrade, [2020](#); Stratton, [2021](#)).

Future research should use larger and more diverse samples to compare students, workers, job seekers, and other Gen Z subgroups in Semarang or other Indonesian cities. Longitudinal designs are also needed to examine whether resilience predicts changes in perceived stress across time. Methodological literature recommends stronger sampling and design planning when researchers want more stable correlation estimates and broader interpretation (Kang, [2021](#); Bujang, [2024](#)). Future studies may also include coping strategies, social support, emotional regulation, digital stress, or self-efficacy as mediating or moderating variables (Pratama & Tondok, [2023](#); Fang et al., [2025](#)).

Conclusion

This study concludes that self-resilience is significantly and negatively associated with perceived stress among Generation Z in Semarang City, indicating that individuals with stronger resilience tend to perceive lower levels of stress when facing academic, occupational, social, and urban life demands. The finding addresses the objective of the study by demonstrating that resilience is not only a personal strength but also a meaningful psychological resource that shapes how young people interpret and respond to pressure. Theoretically, this result supports and extends stress appraisal and resource-based perspectives by showing that resilience may help

reduce stress through adaptive interpretation, emotional tolerance, perceived control, and meaning-making within a local Indonesian urban context. Practically, the findings suggest that universities, workplaces, and youth-oriented organizations should develop resilience-building initiatives that strengthen emotional regulation, problem-solving, supportive relationships, adaptive acceptance of change, and help-seeking behavior. Overall, this study highlights the importance of self-resilience as a strategic factor in promoting psychological well-being among Generation Z and provides a useful basis for designing more contextual and preventive stress-management programs.

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