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Resilience Profiles of Vulnerable and Unstoppable Youth in Generations Z and Alpha

Introduction

The issue of mental health and psychological well-being among younger generations has gained increasing prominence in educational discourse, particularly in the context of challenges within educational settings. Research indicates that certain dimensions of resilience are closely associated with pro-social behavior, which can be a fundamental component of an inclusive educational environment (Moore, Woodcock & Kielblock, 2023). Resilient students are more likely to adapt to changing circumstances, manage school-related stress more effectively, and are less prone to developing mental disorders, which is especially critical during the sensitive developmental stage of adolescence.

Members of Generation Z and Generation Alpha are socialized in a technologically saturated environment where online presence, smartphone use, and social media have become an integral part of their daily lives (Nagy & Kölcsey, 2017). For these generations, the digital space is not merely a source of information but the primary arena for self-expression, social relations, and identity formation. The digital transition in educational institutions, especially during the COVID-19 pandemic, further exacerbated the psychosocial stressors that can affect students' psychological resilience. Therefore, fostering resilience and understanding the factors that shape it among these digital native generations is of paramount importance in pedagogical practice. While technologically confident, these cohorts exhibit heightened sensitivity regarding social relationships, competition, and body image, which became particularly salient in the altered learning environment during the pandemic (Ang et al., 2022).

The aim of the present study is to explore the characteristic resilience profiles of Generation Z and Generation Alpha within the context of a specific region, Fejér County. Although its geographical focus is regional, Fejér County's social, economic, and educational characteristics make it broadly representative of the national average in Hungary; thus, its findings may hold relevant implications at the national level. The region includes both urban and rural educational settings, which allows for a more nuanced understanding of local resilience patterns. Investigations at the local level can be particularly valuable for pedagogical practice, as they can inform the development of targeted preventive and mental health interventions that consider students' social backgrounds, school environments, and generational specificities.

Research Question

What significant differences and distinct resilience profiles can be identified between Generation Z and Generation Alpha, considering the influence of gender and the moderating effects of relevant demographic variables?

H1: *A significant difference exists in the mean resilience scores of members of Generation Z and Generation Alpha. It is hypothesized that members of Generation Z will exhibit lower resilience scores than members of Generation Alpha.*

H2: *A significant difference exists in the mean resilience scores of males and females. It is hypothesized that males will exhibit higher resilience scores than females.*

H3: *Based on the resilience scores, at least three distinct and interpretable resilience profiles (clusters) can be identified within the total sample.*

H4: *Cluster membership shows a significant association with generation and gender. It is hypothesized that members of Generation Z and females will be overrepresented in the low-resilience cluster.*

Literature Review

The study of the mental health and psychological resilience of young people in education is receiving increasing attention in both Hungarian and international research. Supporting mental well-being in the school environment is particularly crucial, as educational institutions play a key role in prevention and in creating an emotionally safe atmosphere (CDC, 2023). Due to societal and technological changes, new challenges have emerged that test students' stress management skills and adaptive strategies. The stress burden observed in early adolescence and the effects of the digital environment play a significant role in the development of resilience, especially through the evolution of coping strategies (Pikó & Hamvai, 2012). Hungarian research also confirms that targeted mental health interventions in educational settings, such as mentoring programs, can enhance young people's resilience and reduce symptoms arising from psychological distress (Pölczman et al., 2025). In this context, resilience as a field of research and development is of paramount importance, especially for preventive and mental health practices within educational institutions.

The scientific interpretation of the concept of resilience has undergone significant development in recent decades, evolving from initial, simplistic approaches to complex, systemic models. Early research focused on the role of risk and protective factors, but the dynamic interaction between the individual and their environment, as well as the potential for developing psychological and social resources, gradually came to the forefront. Among the early models is Michael Rutter's (1987) theory of psychosocial resilience, which emphasized the role of protective mechanisms in mitigating the negative effects of stressful life events. Subsequently, Norman Garmezy (1991) contributed to resilience research by examining developmental risks and protective factors associated with poverty, highlighting the importance of family stability and a supportive environment. Representing a developmental approach, Urie Bronfenbrenner's (2000) ecological systems model interprets resilience on multiple levels, from the individual's immediate environment (family, school) to broader societal and cultural systems. This model fundamentally influenced the systemic thinking of later resilience theories. In the early 2000s, Luthar, Cicchetti, and Becker (2000) provided a critical evaluation of the concept of resilience, emphasizing that the social context, particularly family and school support, plays a crucial role in its development and maintenance. In parallel, Ann Masten's (2001) "ordinary magic" theory posits that resilience is not an extraordinary ability but a natural component of normal development that can emerge spontaneously with adequate environmental support. The dynamic, cyclical nature of resilience is highlighted by Glenn Richardson's (2002) meta-theoretical model, which suggests that individuals are disrupted from their state of equilibrium by stress and then, through coping strategies, regain it or transition to a new, higher level of functioning. A cognitive approach to resilience was developed by Parsons, Kruijt, and Fox (2016), who argue that psychological resilience is based on the flexible functioning of affective-cognitive systems, and that the efficiency of information processing is key to adaptive adjustment to stress. Finally, from the perspective of positive psychology, Luthans, Youssef, and Avolio (2007), in their Psychological Capital (PsyCap) model, define resilience alongside hope, self-efficacy, and optimism as a developable resource of the individual that has a significant impact on performance and mental well-being.

One of the most widely used instruments for measuring resilience is the Connor–Davidson Resilience Scale (CD-RISC), originally developed by Connor and Davidson (2003) for use in clinical and non-clinical populations. The 10-item version of the scale (CD-RISC-10), developed by Campbell-Sills and Stein (2007), is particularly suitable for the rapid and reliable assessment of large samples. This unidimensional scale measures an individual's psychological resilience on a 5-point Likert scale, where higher scores indicate greater resilience. The CD-RISC-10 has demonstrated its reliability through international validation in numerous populations. In addition to the original studies conducted in the United States, the scale has been successfully applied in Spain (Notario-Pacheco et al., 2011), China (Yu et al., 2011), and Australia (Windle et al., 2011), where its psychometric validity has been confirmed in groups with diverse ages and social backgrounds. Its use in Hungary is also becoming more common, especially

among university students and young adults. In the Hungarian validation, Járai et al. (2015) confirmed that the CD-RISC-10 exhibits adequate internal consistency and factor structure, making it suitable for both research and practical applications in assessing resilience.

The relevance of measuring and developing resilience is particularly evident in light of generational specificities. Members of Generation Z (born between 1995 and 2010) were exposed to the internet and digital devices from childhood, which significantly influences their information processing habits, social relationships, and stress management strategies (Evans & Luna, 2018). Research indicates that members of this generation are particularly sensitive to the social pressures mediated by social media, often leading to anxiety, low self-esteem, and body image issues. For Generation Alpha (born after 2010), scientific investigations are still in their initial phase, but it is already apparent that early digital device use, multitasking, and information overload may pose challenges to psychological development and socialization (Barr, 2019; Piccerillo et al., 2025). This difference is also reflected in pedagogical practice, as fostering student resilience requires consideration of their generational traits, social relationship patterns, and technological socialization (Mishra, Sharma, & Garg, 2024).

In summary, an integrated examination of the theoretical and measurement frameworks of resilience, as well as of generational differences, is essential for supporting the mental health of young people. The application of the CD-RISC scale provides an opportunity for pedagogical and mental health interventions to be targeted and tailored to generational specificities, thereby promoting students' psychological well-being and academic success.

Method

Participants

The study included a total of *N*=3275 students from Fejér County. The sample was recruited using a convenience sampling method. An invitation to complete the questionnaire was disseminated to all schools in the county, with participation levels varying by institution; in some schools, all students completed the questionnaire, while in others, participation was limited to specific classes or individual student volunteers. The final sample was composed of students from a total of 45 primary, secondary, and higher education institutions. Of the participants, 46.7% were female (*N*=1529) and 53.3% were male (*N*=1746). The birth years of the participants ranged from 1995 to 2012 (*M*=2006, *SD*=3.17).

For the purposes of this study, Generation Z was defined as individuals born between 1995 and 2009, and Generation Alpha as those born between 2010 and 2025. The sample consisted of 74.4% (*N*=2438) members of Generation Z and 25.6% (*N*=837) members of Generation Alpha. Additional demographic characteristics of the participants are presented in figure of Table 1.

Figure 1 — Demographic Characteristics of the Sample by Generation (N = 3275)

Demographic Variable	Category	Generation Z (*N*=2438)	Generation Alpha (*N*=837)	Total Sample (*N*=3275)
Gender	female	1117 (45.8%)	412 (49.2%)	1529 (46.7%)
	male	1321 (54.2%)	425 (50.8%)	1746 (53.3%)
Institution Type	primary school	532 (21.8%)	684 (81.7%)	1215 (37.1%)
	secondary school	1573 (64.5%)	153 (18.3%)	1726 (52.7%)
	higher education	334 (13.7%)	0 (0.0%)	334 (10.2%)
Field of Study	general	661 (27.1%)	667 (79.7%)	1328 (40.5%
	humanities	859 (35.2%)	69 (8.3%)	928 (28.3%)
	STEM	918 (37.7%)	101 (12.0%)	1019 (31.2%)
Place of Residence	village/town	942 (38.6%)	236 (28.2%)	1178 (36.0%)
	city	937 (38.4%)	283 (33.8%)	1220 (37.3%)
	county seat	514 (21.1%)	305 (36.4%)	819 (25.0%)
	capital city	45 (1.9%)	13 (1.6%)	58 (1.7%)
Parental Education	primary school	71 (2.9%)	30 (3.6%)	101 (3.1%)
	vocational school	382 (15.7%)	65 (7.8%)	447 (13.6%)
	high-school graduation	980 (40.2%)	232 (27.7%)	1212 (37.0%)
	college/university	1005 (41.2%)	510 (60.9%)	1515 (46.3%)

Source: Author's own compilation.

Note. Percentages represent the distribution within each column. N the number of participants.

Measures

This quantitative study employed both online and paper-based surveys, which consisted of two main sections. The first section collected participants' essential sociodemographic data, including gender, year of birth, the name and type of their educational institution, field of study or specialization, permanent place of residence, parents' highest level of education, and average daily internet usage. The second section of the questionnaire utilized the Hungarian-adapted and validated version (Járai et al., 2015) of the 10-item Connor-Davidson Resilience Scale (CD-RISC-10; Connor & Davidson, 2003). The instrument comprises 10 items that assess an individual's ability to cope with stress and adversity. Participants rated the extent to which each statement was true for them over the past month on a five-point Likert scale, ranging from 0 (not true at all) to 4 (true nearly all the time). The total score is calculated by summing the points for each item, with possible scores ranging from 0 to 40, where higher scores indicate a greater level of resilience. The internal consistency of the scale in the present sample (*N*=3275) was good, with a Cronbach's alpha of α=.82, which is close to the original value of α=.85. The results of the item analysis further supported the scale's internal consistency, with corrected item-total correlations ranging from .328 to .621, consistent with findings from both the original and the validation sources. The lowest correlation was found for the item „*I tend to act on a hunch*" (*r*=.328), while the highest was for *„I have a strong sense of purpose"* (*r*=.621). The mean total score on the scale was *M*=26.05 (*SD*=6.96), which is highly comparable to the value reported by Campbell-Sills and Stein (2007) in a large community sample (*M*=27.21, *SD*=5.84; *N*=1622). Based on these results, the CD-RISC-10 was considered a reliable instrument for assessing resilience in the studied population.

Procedure

Data collection took place between September 2022 and May 2023 in educational institutions across Fejér County. For participants who were minors, the respective schools managed the process of obtaining parental/guardian consent. Adult students provided their own consent to participate. All participants were informed about the purpose of the research, the voluntary nature of their involvement, and were assured of the anonymity and confidential handling of their data. The paper-based questionnaires were completed under supervision in a classroom setting, with an average completion time of 10 minutes.

Statistical Analysis

Data processing was conducted using IBM SPSS Statistics 27 and Python (via Google Colab), with the significance level set at α=.05. Descriptive statistics were used to characterize the main features of the sample and the distribution of resilience scores. The Shapiro-Wilk test was applied to assess normality; as the assumption of normality was violated, the Mann-Whitney U test was used for group comparisons. To identify resilience profiles, a two-step cluster analysis was performed. First, a hierarchical cluster analysis (using Ward's method with squared Euclidean distance) was conducted to determine the optimal number of clusters. Subsequently, a k-means cluster analysis was used for the final assignment of participants to the clusters. The relationship between cluster membership and categorical variables was examined using the chi-square test, with the strength of association measured by Cramer's V. For additional exploratory analyses, the Kruskal-Wallis test was employed for nominal variables with more than two categories, while Spearman's rank correlation (r_s) was used to investigate the monotonic relationship with ordinal variables, such as average daily internet usage.

Results

Descriptive Statistical Analyses

Descriptive statistics for the main variables of the study are summarized in figure of Table 2. The mean resilience score for the total sample (*N*=3275) was *M*=26.05 (*SD*=6.96). Regarding generational subgroups, members of Generation Z had a slightly higher mean resilience score (*M*=26.36, *SD*=6.85) than members of Generation Alpha (*M*=25.14, *SD*=7.17).

Figure 2 — Descriptive Statistics for Resilience Scores and Average Daily Internet Use by Generation

Variable	Generation	N	Mean (*M*)	*SD*
Resilience Score (0-40)	Generation Alpha	837	25.14	7.17
	Generation Z	2438	26.36	6.85
	Total	*3275*	*26.05*	*6.96*
Average daily Internet use (hours/day)	Generation Alpha	837	3.33	2.08
	Generation Z	2438	5.05	2.16
	Total	*3275*	*4.61*	*2.27*

Source: Author's own compilation

Average daily internet use for the total sample was *M*=4.61 hours (*SD*=2.27). Members of Generation Z spent more time online on average (*M*=5.05, *SD*=2.16) than the younger students belonging to Generation Alpha (*M*=3.33, *SD*=2.08).

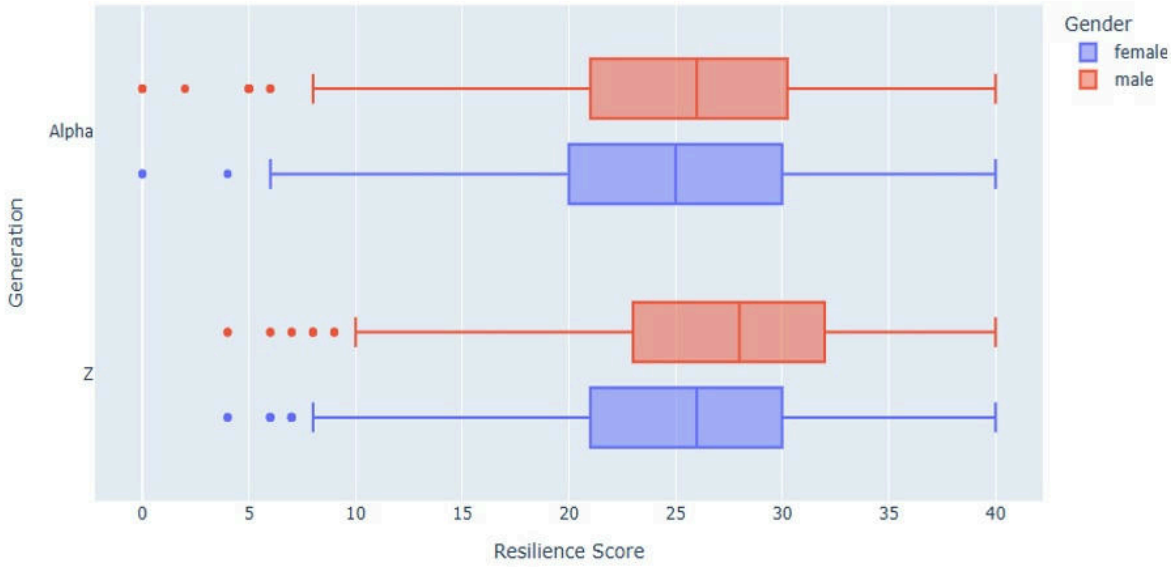
Generational and Gender Differences (Hypotheses H1, H2)

To test the first and second hypotheses (H1, H2), the distribution of total resilience scores (RISC) was examined by generation and gender. The results of the Shapiro-Wilk test indicated that the distribution of scores significantly deviated from normality in both the generational subgroups (Generation Alpha: *W(837)* =.979, *p*<.001; Generation Z: *W(2438)*=.985, *p*<.001) and the gender subgroups (males: *W(1746)* =.980, *p*<.001; females: *W(1529)*=.988, *p*<.001). Due to this violation of the normality assumption, the Mann-Whitney U test was used for group comparisons.

The first hypothesis (H1) posited a significant difference in resilience scores between Generation Z and Generation Alpha, in favor of Generation Alpha. The Mann-Whitney U test revealed a statistically significant difference between the two generations, *U*=923181.50, *z*=-4.119, *p*<.001. However, contrary to the original hypothesis, an examination of the mean ranks indicated that members of Generation Z possessed higher resilience scores (*Mean Rank*=1677.84) than members of Generation Alpha (*Mean Rank*=1521.96).

The second hypothesis (H2) investigated differences between genders, predicting that males would achieve higher scores. The Mann-Whitney U test conducted to compare genders also revealed a significant difference, U=1148668.50, z=−6.902, p<.001. In line with the hypothesis, males exhibited significantly higher resilience scores (*Mean Rank*=1744.61) than females (*Mean Rank*=1516.25).

Figure 3 — Distribution of Resilience Scores by Generation and Gender



Source: Author's own compilation

Figure 3 visually corroborates these findings. The box plot clearly shows that the median values for males are higher than those for females in both generations. Furthermore, the box plots for Generation Z – for both genders – are shifted slightly to the right compared to those for Generation Alpha, indicating the higher resilience scores of Generation Z.

Identification of Resilience Profiles (Hypothesis H3)

To identify resilience profiles, a two-step cluster analysis was conducted. In the first step, based on an analysis of the dendrogram derived from a hierarchical cluster analysis (using Ward's method with squared Euclidean distance) and an examination of the elbow method, a three-cluster solution was deemed optimal. Subsequently, participants were assigned to one of the three clusters using a K-Means cluster analysis. The algorithm reached a stable, convergent solution after 39 iterations.

The analysis successfully identified three distinct and interpretable profiles, thus supporting Hypothesis H3. The size and characteristics of the clusters were as follows:

Cluster 1: Low Resilience (“Vulnerable”)

This was the smallest group, comprising 23.6% of the sample (N=772). Participants in this cluster exhibited the lowest resilience profile. Their mean item scores (cluster centers) typically ranged between 1 (*rarely* true) and 2 (*sometimes true*). They scored particularly low on items related to areas such as stress management („Coping with stress strengthens me” M=1), self-esteem („I think of myself as a strong person” M=1), and a sense of control („I feel I am in control of my life” M=1).

Cluster 2: High Resilience (“Unstoppable”)

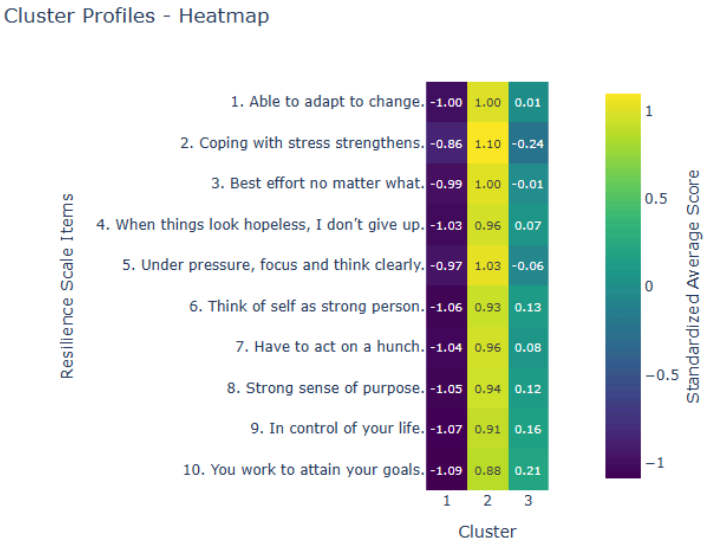
This group comprised 34.9% of the sample (N=1144) and represented the highest resilience profile. The cluster centers were approximately 3 (*often true*) for nearly all items, and they reached the maximum mean score of 4 on the item related to goal pursuit („I work to attain my goals” M = 4). This profile characterizes a group that is consistently confident, proactive, and effective in coping with adversity.

Cluster 3: Average Resilience

Constituting 41.5% of the sample (N=1359), their profile was positioned between the two extreme groups. This group represents a population with a moderate, average level of resilience, who may be confident in some situations but more uncertain in others, with their mean item scores typically falling between 2 and 3.

Figure 4 serves as a visual confirmation of the differences between the resilience profiles.

Figure 4 — Heatmap Representation of the Resilience Profiles



Source: Author's own compilation

The heatmap displays the standardized mean scores (Z-scores) for each cluster on every item of the resilience scale. The dark purple color indicates a systematic negative deviation from the total sample mean, representing lower resilience responses, while the bright yellow color signifies a systematic positive deviation, indicating higher resilience responses. For Cluster 1 („Vulnerable"), a consistent pattern of dark colors is observed, indicating that their responses are systematically below the average (*Z-scores* ≈ −1.0). In sharp contrast, Cluster 2 („Unstoppable") is dominated by bright yellow, signaling consistently above-average, high resilience scores (*Z-scores* ≈ +1.0). Cluster 3 („Average Resilience") is positioned in the middle of the scale, its Z-scores around zero, confirming that this group represents the average of the total sample.

Relationship Between Profiles and Demographic Variables (Hypothesis H4)

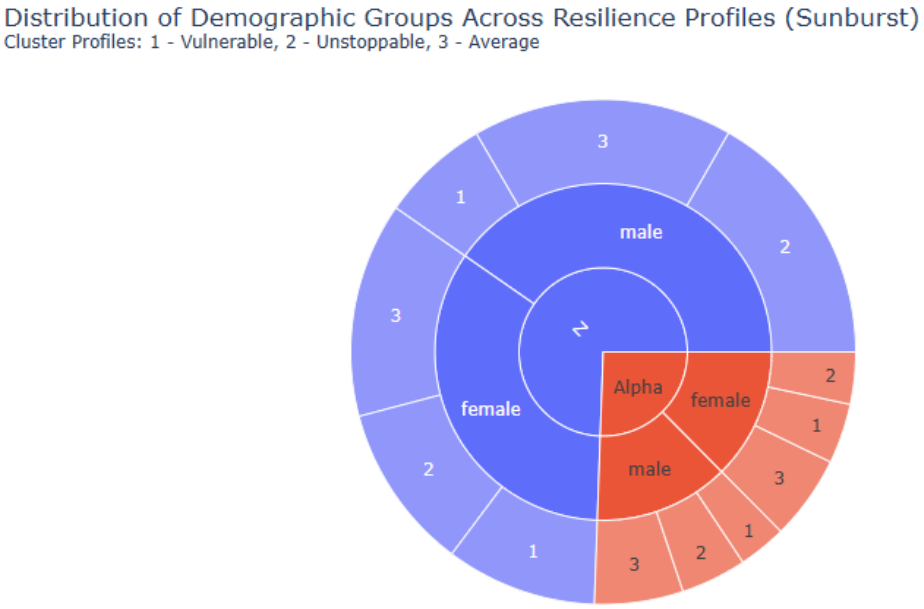
The fourth hypothesis (H4) examined whether cluster membership was significantly associated with generation and gender. The chi-square test revealed a statistically significant, weak association between cluster membership and generation, $\chi^2(2)$=16.415, p<.001, *Cramer's V*=.071. The analysis refuted a portion of the H4 hypothesis. Contrary to the hypothesis, members of Generation Alpha, not Generation Z, were overrepresented in the „Vulnerable" cluster (Gen Alpha 27.1%; Gen Z 22.4%). Correspondingly, members of Generation Z were more likely to be assigned to the „Unstoppable" cluster (36.8%) than members of Generation Alpha (29.5%).

A significant and stronger association was also found between cluster membership and gender, $\chi^2(2)$=55.949, p<.001, *Cramer's V*=.131. The results supported the part of H4 predicting that females would be significantly overrepresented in the „Vulnerable" cluster (females 29.0%, males 18.8%). Consistent with this, males were more likely to belong to the „Unstoppable" cluster (39.3%) than females (30.0%).

In summary, Hypothesis H4 was partially supported. Although cluster membership showed a significant association with both demographic variables, females were overrepresented in the low-resilience group as hypothesized; however, among the generations, it was members of Generation Alpha, not Generation Z, who were overrepresented.

The complex relationship between demographic groups and resilience profiles is summarized in Figure 3. Within the segments corresponding to female participants, the proportion of the „Vulnerable" (cluster 1) is visibly larger than within the segments for male participants. Concurrently, the segment for the „Unstoppable" (cluster 2) is more dominant among males. Generational differences are also observable in Figure 5. Among members of Generation Alpha (the red segment), the proportion of the „Vulnerable" (cluster 1) is slightly larger, whereas for Generation Z (the blue segment), the proportion of the „Unstoppable" (cluster 2) is more pronounced.

Figure 5 — Distribution of Demographic Groups Across Resilience Profiles where 1=„Vulnerable" 2=„Unstoppable" and 3=„Average"



Source: Author's own compilation

Exploratory Analyses

In the exploratory phase of the study, the relationship between resilience scores and additional demographic variables was examined. The results of the Kruskal-Wallis test indicated no significant difference in resilience scores by type of permanent residence, $\chi^2(3)$=6.947, p=.074. In contrast, parental education level had a significant effect on resilience, $\chi^2(3)$=20.135, p<001. Based on the mean ranks, the higher the parental level of education, the higher the students' resilience scores. The highest resilience level was observed among children of parents with university/college degree (*Mean Rank*=1700.38), whereas the lowest was found among children of parents with only a primary school education (*Mean Rank*=1364.15).

Similarly, significant differences were also found by institution type, $\chi^2(2)$=31.677, p<.001, and field of study, $\chi^2(2)$=26.559, p<.001. Students in higher education and secondary school had higher resilience rankings than those in primary school. By field of study, students in STEM (Science, Technology, Engineering, and Mathematics) programs exhibited the highest resilience (*Mean Rank*=1740.13), whereas those in a general curriculum showed the lowest (*Mean Rank*=1541.26).

Finally, a Spearman's rank correlation analysis revealed a significant, weak negative association between resilience and daily internet use, r_s=-.144, p<.001, indicating that more time spent online is associated with lower levels of resilience.

Discussion

The primary objective of the present study was to identify the resilience profiles of Generation Z and Generation Alpha, taking into account the potential effects of gender and other sociodemographic factors. The first hypothesis (H1), which predicted lower resilience in Generation Z compared to Generation Alpha, was rejected. In contrast, the results indicated that members of Generation Z possessed significantly higher resilience scores. This finding contradicts the strand of literature that describes Generation Z as a mentally more fragile and anxious generation, primarily in comparisons with older generations (M. Schmitt & Schmitt, 2024). The findings of this study suggest that members of Generation Z may have developed coping strategies and a degree of hardiness by confronting various life challenges and digital adversities. While previous research has primarily emphasized their vulnerability in comparison to older generations, our findings present a different picture when they are compared with Generation Alpha. The greater experience of Generation Z in managing challenges may explain their higher level of resilience compared to the younger members of Generation Alpha.

Hypothesis H2, which projected higher resilience scores for males compared to females, was supported. This finding is fully consistent with the international literature, which consistently demonstrates that adolescent females report higher rates of internal distress, anxiety, and depression (Kang et al., 2018), which can manifest as lower resilience (Haugan et al., 2021). The underlying reasons for this may include socialization differences, distinct coping styles, and the pressures stemming from societal expectations.

Hypothesis H3, which posited the existence of at least three distinct profiles, was supported. The cluster analysis identified three separate groups: „Vulnerable" (low resilience), „Average" and „Unstoppable" (high resilience) profiles. This person-centered approach confirms that resilience is not a simple linear dimension but rather a dynamic and complex set of patterns (Masten & Barnes, 2018).

Hypothesis H4 was partially supported. Females were significantly overrepresented in the „Vulnerable" cluster. In terms of generation, the results aligned with the findings for H1, showing that members of Generation Alpha, rather than Generation Z, were more frequently assigned to this vulnerable group. This suggests that fostering resilience warrants particular focus among the younger cohort, especially among females.

The exploratory analyses provided a more nuanced picture. The positive relationship between parental education and resilience aligns with research examining the links between socioeconomic status and mental well-being (Bøe et al., 2013), as more highly educated parents can typically provide more resources (financial, social, and cultural) for their children. The weak, negative correlation between daily internet use and resilience is also consistent with studies that call attention to the relationship between excessive screen time and deteriorating mental health (Hidalgo-Fuentes et al., 2023).

Strengths and Limitations

The strengths of this study include its large sample size (N>3000), which enhances the statistical power and reliability of the findings. Additionally, the comparison of two distinct generations and the application of a person-centered cluster analysis allow for a more in-depth understanding of the construct.

However, the study is not without limitations. Its cross-sectional design precludes the establishment of causal relationships. Furthermore, due to the lack of representative sampling, the findings cannot be generalized to the wider population. The use of self-report measures may also introduce potential biases, particularly among the younger generation of participants and the results should be interpreted with caution.

Summary
This study undertook a complex exploration of resilience in Generation Z and Generation Alpha within the context of gender and other sociodemographic factors. The analysis of a sample of 3275 participants successfully identified three distinct resilience profiles: a low-resilience „Vulnerable" group, a high-resilience „Unstoppable" group, and an „Average" profile that constituted the largest portion of the population.

Our findings offer a nuanced perspective on these younger generations. Contrary to expectations from the literature, it was members of Generation Alpha, not Generation Z, who exhibited lower levels of resilience and were more frequently assigned to the vulnerable cluster. However, gender differences were consistent with previous research: males proved to be more resilient, while females were overrepresented in the „Vulnerable" group. The results also highlighted the importance of parental background, confirming that higher socioeconomic status is associated with higher resilience.

Future longitudinal studies could help disentangle generational from age-related effects and track the developmental trajectories of resilience. Additionally, future research employing qualitative and mixed-methods approaches would be valuable for exploring the specific coping strategies and life experiences underlying the different clusters.

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