UDK: 159.923:159.922

Yuldasheva Nilufarkhon Sherqozi qizi,
Department of Pedagogical Education and Psychology of Renessans Education University, senior teacher, PhD

INTERRELATION OF IMPOSTER SYNDROME, RIGIDITY, AND SELF-CONFIDENCE CHARACTERISTICS ACROSS DIFFERENT AGE PERIODS

Abstract. This study explores the interrelation of impostor syndrome, rigidity, and self-confidence across different age periods based on a sample of 1,430 participants. A comparative analysis of five age groups revealed significant age differences in impostor syndrome (H=16.56, p=0.002) and self-confidence (H=22.42, p=0.000), while rigidity showed no significant variation (H=0.94, p=0.918). Impostor syndrome was more pronounced in adulthood, whereas self-confidence was highest in early adolescence and decreased with age. The findings indicate developmental changes in impostor syndrome and self-confidence, while rigidity remains relatively stable across the lifespan.

Keywords: impostor syndrome, rigidity, self-confidence, age differences, developmental psychology.

ОСОБЕННОСТИ ВЗАИМОСВЯЗИ СИНДРОМА ИМПОСТЕР, РИГИДНОСТИ И УВЕРЕННОСТИ В СЕБЕ В РАЗНЫЕ ВОЗРАСТНЫЕ ПЕРИОДЫ

Аннотация. В исследовании рассматривается взаимосвязь синдрома импостера, ригидности и уверенности в себе в разные возрастные периоды на выборке из 1430 человек. Сравнительный анализ пяти возрастных групп выявил значимые различия по синдрому импостера (H=16.56, p=0.002) и уверенности в себе (H=22.42, p=0.000), тогда как по ригидности различий не обнаружено (H=0.94, p=0.918). Синдром импостера наиболее выражен в зрелом возрасте, а уверенность в себе выше в раннем подростковом возрасте и снижается с возрастом. Полученные результаты указывают на возрастную динамику данных психологических характеристик.

Ключевые слова: синдром импостера, ригидность, уверенность в себе, возрастные различия, психология развития.

IMPOSTER SINDROMI, RIGIDLIK VA O‘ZIGA ISHONCH XUSUSIYATLARINING TURLI YOSH DAVRLARIDAGI O‘ZARO BOG‘LIQLIGI

Annotatsiya. Mazkur tadqiqotda imposter sindromi, rigidlik va o‘z-o‘ziga ishonchning turli yosh davrlaridagi o‘zaro bog‘liqligi 1430 nafar ishtirokchi

misolida tahlil qilindi. Beshta yosh guruhi o‘rtasidagi qiyosiy tahlil imposter sindromi (H=16.56, p=0.002) va o‘z-o‘ziga ishonch (H=22.42, p=0.000) bo‘yicha ahamiyatli farqlarni ko‘rsatdi, rigidlik bo‘yicha esa farq aniqlanmadi (H=0.94, p=0.918). Imposter sindromi katta yosh davrida kuchliroq namoyon bo‘ldi, o‘z-o‘ziga ishonch esa erta o‘smirlikda yuqori bo‘lib, yosh bilan pasayib boradi. Natijalar ushbu psixologik xususiyatlarning yoshga xos dinamikasini ko‘rsatadi.

Kalit so‘zlar: imposter sindromi, rigidlik, o‘z-o‘ziga ishonch, yoshga oid farqlar, rivojlanish psixologiyasi.

The phenomenon of impostor syndrome, characterized by persistent self-doubt and the fear of being exposed as incompetent despite evident success, has gained increasing attention in psychological research over the past decades. It is considered a multidimensional construct that reflects both cognitive distortions and affective instability. Parallel to this, self-confidence is recognized as a protective factor that facilitates adaptive functioning, while rigidity – defined as the resistance to cognitive and behavioral flexibility – may represent a stabilizing yet limiting personality trait. Examining the interrelation of these characteristics across different stages of life provides valuable insights into developmental psychology and personality dynamics.

Adolescence and early youth represent critical periods of identity formation, during which the tension between self-doubt and self-assurance becomes particularly salient. In contrast, adulthood and later life stages are often marked by increased social responsibilities and professional demands, which may intensify impostor feelings or alter self-confidence trajectories. While previous research has highlighted the prevalence of impostor syndrome among students and professionals, less attention has been directed toward age-related variations and their interplay with rigidity and self-confidence.

The present study aims to investigate differences in impostor syndrome, self-confidence, and rigidity across five distinct age groups: early adolescence, adolescence, youth, adulthood, and the second stage of adulthood. By comparing these constructs across developmental periods, the study seeks to identify patterns of change and stability, thereby contributing to a deeper understanding of personality development and its psychological correlates.

Impostor syndrome was first introduced by Clance and Imes (1978), who described it as a pervasive internal experience of intellectual fraudulence despite objective indicators of competence. Since then, numerous studies have emphasized its prevalence across various populations, including students, professionals, and academics (Parkman, 2016; Bravata et al., 2020). Empirical evidence indicates that impostor tendencies are particularly common in transitional developmental stages such as adolescence and early adulthood, when individuals face increasing academic and professional demands (Villwock et al., 2016). Furthermore, impostor feelings are associated with heightened anxiety, depression, and perfectionism, which in turn hinder personal growth and performance (Neureiter & Traut-Mattausch, 2016).

In contrast, self-confidence is widely recognized as a critical psychological resource that fosters resilience and adaptive coping across the lifespan (Bandura, 1997). High self-confidence contributes to positive self-appraisal, motivation, and persistence in the face of challenges (Schunk & Pajares, 2002). Developmental studies demonstrate that self-confidence tends to be relatively strong during early adolescence but may decline as individuals encounter increased social comparison and external pressures in later developmental stages (Zimmerman, 2000). The inverse relationship between impostor syndrome and self-confidence has been documented, suggesting that low self-assurance amplifies self-doubt and susceptibility to impostor feelings (Sakulku & Alexander, 2011).

Rigidity, often conceptualized as cognitive or behavioral inflexibility, represents a relatively stable personality trait. Research shows that rigidity can serve both adaptive and maladaptive functions: while it contributes to consistency and perseverance, excessive rigidity may hinder creativity, problem-solving, and adjustment to change (Block, 2002). Some scholars argue that rigidity remains relatively stable across the lifespan (Caspi, Roberts, & Shiner, 2005), while others highlight its contextual variability depending on environmental demands (Mischel & Shoda, 1995). The interaction of rigidity with impostor syndrome and self-confidence remains underexplored, although theoretical models suggest that rigid cognitive patterns may exacerbate impostor thoughts by reinforcing maladaptive self-beliefs (Vergauwe et al., 2015).

Taken together, prior research highlights the developmental significance of impostor syndrome, self-confidence, and rigidity. Yet, few studies have simultaneously examined these constructs across multiple age periods. Understanding their interrelations across different stages of life may provide insights into personality development and inform targeted interventions in educational and organizational contexts.

This research was conducted on a sample of 1,430 participants representing five different age groups: early adolescence (N=663), adolescence (N=410), youth (N=110), adulthood (N=112), and the second stage of adulthood (N=135). The participants were selected through stratified random sampling in order to ensure age-representative coverage, and all respondents were informed about the aim of the study, confidentiality measures, and ethical considerations before voluntarily taking part. Three standardized instruments were used for data collection. The impostor syndrome was assessed using the Clance Impostor Phenomenon Scale (CIPS; Clance, 1985), which evaluates the cognitive and emotional dimensions of impostor feelings. Self-confidence was measured with a validated questionnaire assessing perceived competence, self-assurance, and self-efficacy in both academic and social domains. Rigidity was examined through a psychological test designed to identify cognitive and behavioral inflexibility. All three instruments demonstrated acceptable reliability, with Cronbach's alpha values above 0.70. Data were collected in group sessions across educational and community settings under the supervision of trained psychologists. Participants were instructed to respond anonymously and as honestly as possible. The collected data were screened for completeness and accuracy prior

to statistical processing. Since the dataset did not fully meet parametric assumptions, non-parametric tests were applied. In particular, the Kruskal–Wallis H-test was used to identify age-related differences in impostor syndrome, self-confidence, and rigidity, and mean rank scores were calculated for each age group. The level of statistical significance was set at $p < 0.01$, and the results were summarized in tables for further interpretation.

The comparative analysis revealed statistically significant differences in impostor syndrome across age groups. The Kruskal–Wallis test showed a significant effect ($H = 16.56$, $p = 0.002$), indicating that impostor tendencies varied depending on developmental stage. The highest mean ranks were observed in adulthood (774.94) and the second stage of adulthood (819.25), suggesting that impostor feelings were more pronounced during later stages of life. In contrast, early adolescence (680.05) and youth (688.27) demonstrated comparatively lower levels, although adolescence itself showed a slightly elevated mean rank (728.25). These results suggest that impostor syndrome may intensify as individuals face greater social and professional responsibilities.

1-table

Differences in impostor syndrome methodology by age periods (N = 1430)

Indexes	Mean rank					Statistical value	
	Early adolescence (N-663)	Adolescence (N-410)	Youth (N-110)	Adulthood (N-112)	Second stage of adulthood (N-135)	H	p
Imposter syndrome	680,05	728,25	688,27	774,94	819,25	16,56	0,002**
Rigidity	725,19	710,11	694,15	711,41	699,64	0,94	0,918
Self-confidence	747,98	729,57	696,88	592,10	619,61	22,42	0,000**

Inter: ** - p<0.01

Regarding self-confidence, the findings also revealed significant age-related differences ($H = 22.42$, $p = 0.000$). The highest mean rank was found in early adolescence (747.98), followed by adolescence (729.57). However, there was a marked decline in youth (696.88), adulthood (592.10), and the second stage of adulthood (619.61). This indicates a downward trajectory of self-confidence across age periods, suggesting that while younger individuals tend to display stronger self-assurance, this gradually decreases with maturity and increased external demands.

In contrast to the above results, the rigidity test did not reveal statistically significant differences across age groups ($H = 0.94$, $p = 0.918$). The mean ranks ranged between 694.15 and 725.19, with only slight variations between developmental stages. This outcome suggests that rigidity, as a personality trait,

remains relatively stable over the lifespan, showing no substantial shifts between adolescence, youth, and adulthood.

Overall, the results demonstrate that impostor syndrome and self-confidence undergo notable developmental changes across age groups, while rigidity appears to remain consistent. These findings highlight the dynamic nature of impostor-related experiences and self-assurance in contrast to the relative stability of rigid cognitive-behavioral patterns.

The present study investigated the interrelation of impostor syndrome, self-confidence, and rigidity across different age groups, providing new insights into the developmental dynamics of these psychological constructs. Based on a large sample of 1,430 participants, the findings revealed that impostor syndrome and self-confidence vary significantly with age, whereas rigidity remains relatively stable throughout the lifespan.

The results demonstrated that impostor syndrome tends to intensify in adulthood and the second stage of adulthood, reflecting the impact of increased social, professional, and familial responsibilities during these stages of life. This suggests that impostor feelings are not limited to academic or early career contexts, as highlighted in much of the previous literature (Clance & Imes, 1978; Bravata et al., 2020), but may persist or even strengthen as individuals encounter higher expectations and external pressures. Such findings underline the importance of addressing impostor tendencies not only among students and young professionals but also within broader adult populations.

Self-confidence, on the other hand, showed the highest levels in early adolescence, with a gradual decline observed in later stages of life. This pattern is consistent with research suggesting that younger individuals often report higher self-assurance, which may decrease as they face greater social comparisons, challenges in identity formation, and professional demands (Zimmerman, 2000; Schunk & Pajares, 2002). The observed decline across age groups highlights the necessity of fostering and maintaining self-confidence through targeted psychological interventions, mentorship, and supportive environments across the lifespan.

Rigidity did not show significant differences between age groups, indicating that it may represent a relatively stable personality trait. This aligns with prior studies suggesting that certain dispositional characteristics, such as cognitive inflexibility, remain consistent across time (Caspi, Roberts, & Shiner, 2005). Although rigidity can provide stability and persistence, excessive levels may limit adaptability in changing environments. The absence of variation across age groups suggests that interventions targeting rigidity should focus less on developmental stages and more on situational or contextual factors.

Taken together, these findings highlight that impostor syndrome and self-confidence are dynamic constructs sensitive to developmental changes, whereas rigidity remains constant. The interplay of these characteristics suggests that individuals with lower self-confidence may be more vulnerable to impostor feelings, while rigidity could exacerbate such tendencies by reinforcing maladaptive self-beliefs. This study contributes to the literature by examining these constructs

simultaneously across multiple age periods, offering a broader developmental perspective.

In practical terms, the results emphasize the importance of early psychological support to strengthen self-confidence and reduce impostor tendencies before they become entrenched in adulthood. Educational institutions, workplaces, and community programs should consider implementing preventive strategies, such as mentorship programs, confidence-building interventions, and training in cognitive flexibility, to mitigate the negative impact of impostor syndrome. Furthermore, recognizing that impostor feelings remain prevalent well into adulthood underscores the need for continuous psychological support across the lifespan.

In conclusion, this study provides evidence that impostor syndrome and self-confidence follow distinct developmental trajectories, while rigidity remains stable, underscoring their unique contributions to personality development. Future research should explore the causal mechanisms underlying these relationships, the role of cultural and contextual factors, and the effectiveness of targeted interventions aimed at reducing impostor tendencies and fostering healthy self-confidence across all stages of life.

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