

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

Mellenia Dinda Saputri<sup>1\*</sup>, Machika Khoirunnisa<sup>2</sup>

### ABSTRACT

*Impostor Syndrome* is a feeling of unworthiness for the success achieved and accompanied by a fear of being discovered as a fraud. This syndrome is not a mental disorder, but it can affect a person's mental health and performance. This systematic review was carried out to find out what factors contribute to Impostor Syndrome. Data collection was carried out by searching for relevant journals in databases, namely Google Scholar, Sage Journals, Taylor & Francis Online, Wiley Online Library, Scopus and Pubmed. There are a total of 13 journals selected and internationally accredited. From these results it was found that in general, the factors that influence Impostor Syndrome are external factors in the form of family environment, academic environment and social support, while internal factors that influence are personality such as perfectionism, self-confidence, abilities, adaptation style and mindset. However, there are also other factors that influence, namely gender, age and the field in which you are working.

**Keywords:** *Impostor Syndrome, Influencing Factors*

Impostor Phenomenon which is also called Impostor Syndrome, which was first researched by clinical psychologists Pauline R. Clance and Suzanne A. Imes in 1978 and the results of the research show that many high achieving women experience a thought pattern in which high achieving individuals feel unworthy of their achievements. Despite having clear external evidence of competence, they continually feel like impostors and believe that success is the result of luck, good timing, or deceiving others (Clance & Imes, 1978). Meanwhile, according to (Harvey, 1981), Impostor Syndrome is a psychological pattern that is rooted in a very strong and hidden sense of deception in completing a task. Individuals who experience Impostor Syndrome consider all achievements to be the result of chance, not their own abilities, and view achievements as unimportant. As a result, the individual feels he is a highly skilled fraudster and does not have significant competence. The individual's view of this phenomenon results in maladaptive behavior which will have a negative impact to yourself like detrimental to an individual's physical and mental health.

<sup>1</sup>Faculty of Psychology, University of Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang – Jawa Timur 65144, Indonesia

<sup>2</sup>Faculty of Psychology, University of Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang – Jawa Timur 65144, Indonesia

\*Corresponding Author

Received: May 26, 2024; Revision Received: October 10, 2024; Accepted: October 14, 2024

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

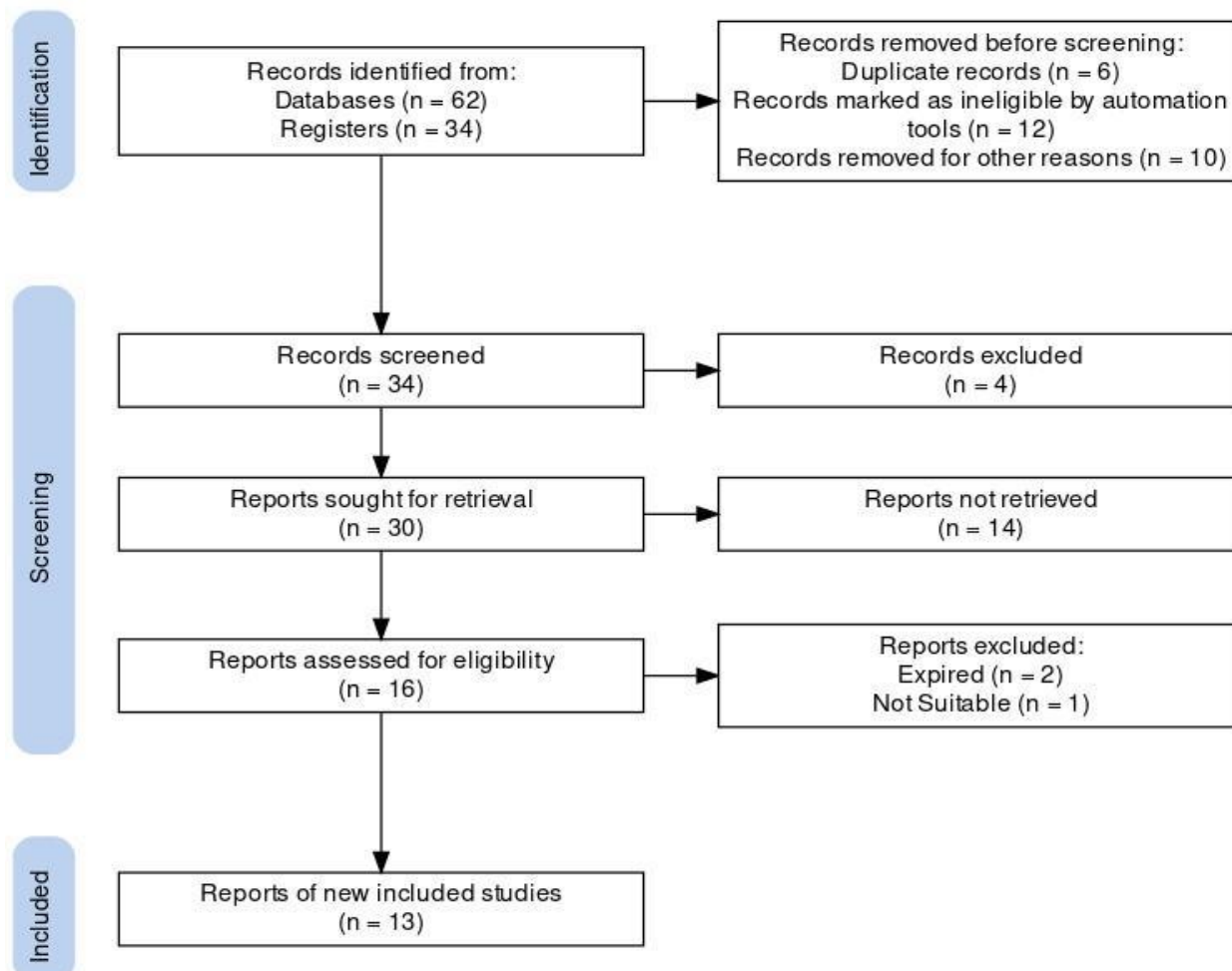
Individuals who experience Impostor Syndrome will often feel excessive anxiety and fear because they are unable to achieve unrealistically high expectations or are unable to be exposed to the people around them. Therefore, the psychological condition of Impostor Syndrome can have a negative impact on mental health and if it cannot be managed properly it can develop into a serious mental health disorder. Among the negative impacts are psychological pressure, anxiety and depression, such as emotional burnout which is characterized by emotional exhaustion, depersonalization and decreased productivity due to self-doubt so that individuals try to avoid tasks that can improve their performance and individuals will avoid positive praise, which causes them to become unmotivated. rational in assessing one's own abilities (Chandra et al., 2019). Despite the fact that *Impostor Syndrome* is not included in the Mental Disorder Diagnosis Classification Guidelines (PPDGJ), but the emotional stress caused by this condition has a negative impact on mental health and has the potential to develop into depression.

Based on the description above, the research aims to find out what factors influence Impostor Syndrome. Previously, it should be noted that there is research that has carried out a systematic review by (Bravata et al., 2020). In addition, the aim of this research is to obtain information about previous research or studies that are relevant to support the latest research at this time.

### **METHODOLOGY**

The preparation of this literature review begins with the stage of creating research questions, using the SPIDER formulation (Sample, Phenomenon of Interest, design, Evaluation, Research Type) with reference to this systematic question, the author formulates research questions. The research question in this review is, what are the factors that influence Impostor Syndrome? Next, the author continues the process by designing search keywords in the database. After the author obtained the terms from the research question, the author continued the search with the terms found, namely Impostor Phenomenon and Impostor Syndrome. From several search terms, the author entered several databases, namely Google Scholar, Scopus, Sage Journals, Taylor & Francis Online, Wiley Online Library and Pubmed. After several articles were collected, the author checked for duplication using Mendley.

Figure 1. PRISMA Graphic (Haddaway et al., 2022) Journal Selection Flow.



The journal selection flow can be seen through the prism graph in Figure 1. Researchers determine the boundaries in journal reviews by; 1) The journal discusses Impostor Syndrome, 2) Year of publication of the journal in the last 5 years from 2019-2024, 3) English language journal, 4) Types of quantitative and qualitative research. There are several criteria for journals that will not be selected, namely; 1) Journals that are not internationally accredited, 2) do not use English, 3) Articles in book form, meta-analysis, and research without methods not clearly described, 4) Journals outside the 2019-2024 year range. The author determined the exclusion criteria for research journals outside the publication year that had been determined from the journals. Finally, 13 journals were found that met the requirements and were identified.

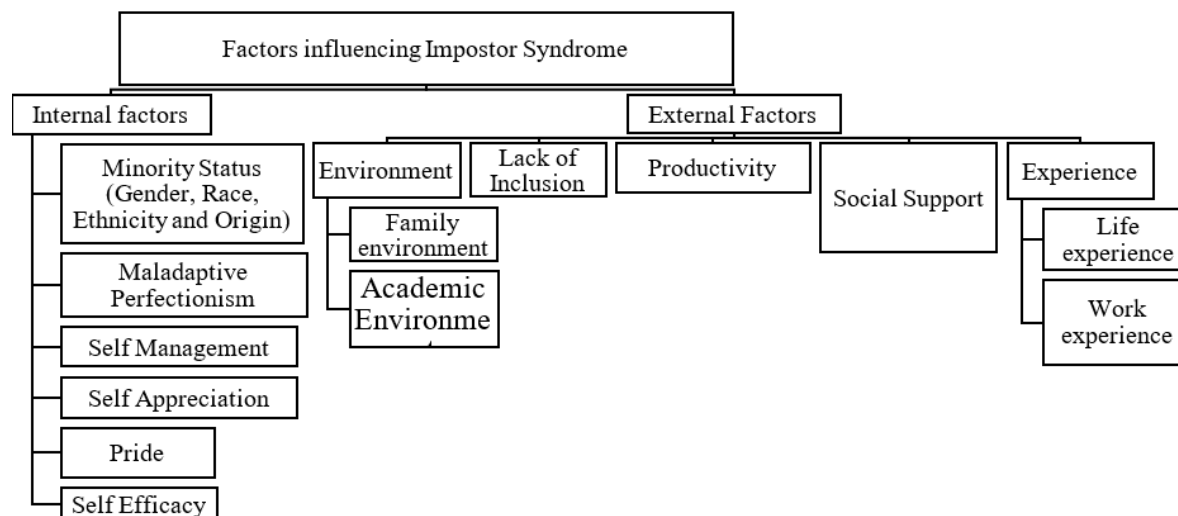
## DISCUSSION

From the results of the journals that have been obtained, it is found that the majority of individuals do not recognize Impostor Syndrome. Results from 13 journals show that the number of individuals who know and understand this phenomenon is relatively low. As a result, most are not aware that they have experienced it. *Impostor Syndrome* due to a lack of awareness and understanding of this psychological condition. (Langford & Clance, 1993) explains that Impostor Syndrome behavior in individuals can make individuals not believe in their own ability to achieve, giving rise to feelings of wanting to show off to others. Individuals who experience Impostor Syndrome are very motivated in an academic context

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

to appear smart (performance goal) and become anxious, embarrassed, and very concerned about other people's judgment when facing difficulties in the learning process. After conducting research, it was found that the factors that influence Impostor Syndrome are internal factors and external factors as described in table 1.

**Table 1. Factors influencing Impostor Syndrome**



### Table list of forms of Academic Resilience in students

Review of research results on factors influencing Impostor Syndrome

No	Writer	Subject	Country	Research result	Factor affecting
1	(Wang et al., 2019)	169 Students	Russia	The results of this research show that identify Impostor Syndrome can be used as a first step to prevent depression due to perfectionism.	Maladaptive Perfectionism
2	(Kogan et al., 2020)	941 Students	United States of America	The results of this study showed that 941 of 631 participants exceeded the Impostor Syndrome cutoff score Ordinal regression shows that the three variables, namely country of residence, gender, and length of experience in practice are significantly related.	Living environment, gender and work experience
3	(Odera et al., 2021)	9 Teachers	United States of America	The results of qualitative research with Black women yielded two clusters of themes.	External: Productivity, Lack of Inclusion and Interaction with the Environment Internal: Self Management, Appearance and

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

No	Writer	Subject	Country	Research result	Factor affecting
					Changing Language Procedures (Adapting)
4	(Soares et al., 2021)	380 Students	Brazil	The results of correlation and regression analyzes show that individuals with high levels of Impostor Syndrome have lower self-esteem and more maladaptive perfectionism. Meanwhile, self-esteem is positively correlated with adaptive perfectionism and negatively with maladaptive perfectionism. Two path analyzes showed that self-esteem partially mediated the relationship between perfectionism (maladaptive and adaptive) and Impostor Syndrome, with larger effects in cases of maladaptive perfectionism.	Pride Maladaptive Perfectionism
5	(Fitriyah, 2022)	1 Student (Narration)	Indonesia	The results of this narrative explain that the importance of self-appreciation and social support influences how individuals experience Impostor Syndrome	Self-Appreciation and Social Support
6	(Ogeda et al., 2023)	200 Students	Brazil	The research results show a statistically significant correlation, namely a high level of self-efficacy to a low level of Impostor Syndrome.	Self-Efficacy
7	(Nori & Vanttaja, 2023)	192 Doctoral Program Students	Finland	Based on the results of linear regression analysis, a lack of encouragement in childhood and a low level of planning when applying for doctoral studies explain the emergence of Impostor Syndrome in a statistically significant way.	Life Experience (Life Experienter), Social Support and Level of Study Planning
8	(Rice et al., 2023)	Student	United States of America	This study examines the differences in Impostor Syndrome between UiM (Minority), non-UiM (Minority) students at PWI (dominantly White Universities) and HBCUs (dominantly Black Universities). The results of three-way ANOVA calculations with gender, minority status, and university type revealed a two-way interaction which showed	Gender Minority Status (Blacks and Whites)

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

No	Writer	Subject	Country	Research result	Factor affecting
				that: Women scored higher than men. UiM and non-UiM rates of Impostor Syndrome were similar, but UiM students from PWIs reported higher rates of impostor syndrome than their counterparts at HBCUs	
9	(Opara et al., 2023)	106 Students	Slovenia	The research results found that the majority of physiotherapy students experienced Impostor Syndrome, especially women. Impostor Syndrome will decrease with increasing age and length of clinical work experience.	Gender, Age and Work Experience
10	(Gibson & Lockwood, 2024)	92 Students	English	The research results showed that 77% had Impostor Syndrome. However, year of study showed significant differences with second year students being higher than first and third year students. There are also significant differences between men and women.	Year of study Gender Placement Environment
11	(Iwai et al., 2023)	2,183 doctors	United States of America	A total of 2,183 attending and retired physicians were assigned to 2 groups: 1,471 (67.4%) were in a leadership role and 712 (32.6%) were not. From the research results, leadership positions have low Impostor Syndrome scores. However, from the results (90.0% vs 67.7%; $p < 0.001$ ), it means that female doctors are more dominant in experiencing Impostor Syndrome compared to male doctors.	Gender
12	(Ogunyemi et al., 2022)	198 Students	United States of America	From the overall results, 57% were positive for Impostor Syndrome. Identified influences included: parental expectations = 72%, female gender = 58%, and academic competition = 37%.	Parental Expectations, Gender and Academic Competition
13	(Wei et al., 2024)	1,897 Students	China	The research results show that Impostor Syndrome is increasing depressive symptoms, and influence increasing suicidal ideation. Family support and friend support reduce the impact of Impostor Syndrome, but only family support significantly moderates it.	Social Support

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

The results of research from (Kogan et al., 2020; Shinawatra et al., 2023) show that the factors that influence individuals who experience Impostor Syndrome is Environmental. The environment in question is such as; 1. Family Environment, individuals tend to come from families that provide little support for the individual, family rules that limit communication and behavior, and families that are full of conflict. Individuals with less family support feel the need to please their family members with their achievements and families who instill the belief that they are intelligent and talented. As an adult, he felt doubtful about his parents' judgment, so he hid his difficulties and tried to defend his family's judgment. 2. Academic Environment as research results from (Rice et al., 2023) explain the academic environment is how the situation of individuals competing for grades, awards, or recognition in academic fields. This Academic Competition can increase stress and anxiety, and can cause individuals to focus on grades and results rather than the learning process. 3. Social Support, social support can turn into social pressure if individuals feel they have to meet other people's expectations and there may also be conflict in interpersonal relationships with colleagues. However, explained by findings from (Wei et al., 2024) shows that Impostor Syndrome can have serious consequences, especially family support can influence and reduce its impact.

Internal factors that influence personality include perfectionism, self-confidence, abilities, adaptation style and thought patterns. Research from (Sverdlik et al., 2020; Wang et al., 2019) reveals that excessive perfectionism can increase the risk of depression because individuals often feel dissatisfied with the results they have achieved and also often procrastinate because individuals are afraid to start tasks for fear of not can achieve perfection, this is called Maladaptive Perfectionism where is the individual set very high standards which causes excessive stress and anxiety. Meanwhile, research from (Fitriyah, 2022; Ogeda et al., 2023; Soares et al., 2021) reveals that self-confidence (Self Efficacy) individuals regarding their ability to carry out plans and complete tasks as well as how individuals value themselves which means not comparing yourself with others, but focusing on developing yourself. Qualitative research by (Odera et al., 2021) also reveals that Inability to adapt to new demands and cultures can cause difficulties in adjusting, as a result, failure to adapt can increase the risk of depression, reduce self-confidence and self-esteem.

The results of research from (Iwai et al., 2023) which explains that female doctors are very likely to experience Impostor Syndrome due to gender stereotypes that consider women to have less abilities than men, The lack of representation of women in leadership positions and the field of medicine being overwhelmingly male dominated can make women feel inadequate and not competent enough and women are more likely to have a perfectionist streak, which can make them feel like they are never good enough and always under pressure to achieve perfection. Hormonal changes in women also affect hormone fluctuations during the menstrual cycle, pregnancy and menopause, which can affect mood, increase self-confidence, and therefore women are susceptible to experiencing *Impostor Syndrome*.

## CONCLUSION

Individuals who experience Impostor Syndrome will have difficulty accepting and internalizing the success they have achieved so that efforts are needed to reduce and overcome the level of Impostor Syndrome, before efforts to reduce the action that needs to be taken is knowing what factors influence it to be more effective in identifying problems that occur. Several factors that can influence factors that influence Impostor Syndrome are

## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

external factors in the form of family environment, academic environment and social support, while internal factors that influence include gender, age, race, ethnicity and personality such as perfectionism, self-confidence, abilities, adaptation style and mindset. Our results show that impostor symptoms are prevalent among both men and women, but are more prevalent among women and members of some ethnic groups and are significantly associated with worsened individual experiences in both academic and professional settings. Researchers encourage teachers and professionals to pay attention to the possibility of this phenomenon occurring and take steps to reduce this feeling.

### REFERENCES

- Bravata, D. M., Watts, S. A., Keefer, A. L., Madhusudhan, D. K., Taylor, K. T., Clark, D. M., Nelson, R. S., Cokley, K. O., & Hagg, H. K. (2020). Prevalence, Predictors, and Treatment of Impostor Syndrome: a Systematic Review. *Journal of General Internal Medicine*, 35(4), 1252–1275. <https://doi.org/10.1007/s11606-019-05364-1>
- Chandra, S., Huebert, C. A., Crowley, E., & Das, A. M. (2019). Impostor syndrome: could it be holding you or your mentees back? *Chest*, 156(1), 26–32.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice*, 15(3), 241–247. <https://doi.org/10.1037/h0086006>
- Fitriyah, S. M. (2022). Surviving Impostor Syndrome: Navigating Through the Mental Roller Coaster of a Doctoral Sojourn. *Journal of International Students*, 12(2), 550–555. <https://doi.org/10.32674/jis.v12i2.3274>
- Gibson, C., & Lockwood, P. (2024). Impostor phenomenon traits in radiography students: Findings from a UK pilot survey. *Radiography*, 30(1), 61–65. <https://doi.org/10.1016/j.radi.2023.10.005>
- Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. *Campbell Systematic Reviews*, 18(2), e1230. <https://doi.org/10.1002/cl2.1230>
- Harvey, J. C. (1981). *The impostor phenomenon and achievement: A failure to internalize success*. Temple University.
- Iwai, Y., Yu, A. Y. L., Thomas, S. M., Fayanju, O. A., Sudan, R., Bynum, D. L., & Fayanju, O. M. (2023). Leadership and Impostor Syndrome in Surgery. *Journal of the American College of Surgeons*, 237(4). [https://journals.lww.com/journalacs/fulltext/2023/10000/leadership\\_and\\_impostor\\_syndrome\\_in\\_surgery.1.aspx](https://journals.lww.com/journalacs/fulltext/2023/10000/leadership_and_impостor_syndrome_in_surgery.1.aspx)
- Kogan, L. R., Schoenfeld-Tacher, R., Hellyer, P., Grigg, E. K., & Kramer, E. (2020). Veterinarians and impostor syndrome: An exploratory study. *Veterinary Record*, 187(7), 271. <https://doi.org/10.1136/vr.105914>
- Langford, J., & Clance, P. R. (1993). The imposter phenomenon: Recent research findings regarding dynamics, personality and family patterns and their implications for treatment. *Psychotherapy: Theory, Research, Practice, Training*, 30(3), 495.
- Nori, H., & Vanttaja, M. (2023). Too stupid for PhD? Doctoral impostor syndrome among Finnish PhD students. *Higher Education*, 86(3), 675–691. <https://doi.org/10.1007/s10734-022-00921-w>
- Odera, S., Alex Wagaman, M., Staton, A., & Kemmerer, A. (2021). Decentering whiteness in social work curriculum: An autoethnographic reflection on a racial justice practice course. *Advances in Social Work*, 21(2–3), 801–820. <https://doi.org/10.18060/24151>



## Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review

- Ogeda, C. M. M., Adurens, F. D. L., & Pedro, K. M. (2023). Autoeficácia e Síndrome do Impostor em pós-graduandos: um retrato da pandemia da COVID-19. *Interação Em Psicologia*, 26(3). <https://doi.org/10.5380/riep.v26i3.78064>
- Ogunyemi, D., Lee, T., Ma, M., Osuma, A., Eghbali, M., & Bouri, N. (2022). Improving wellness: Defeating Impostor syndrome in medical education using an interactive reflective workshop. *PLoS ONE*, 17(8 August), 1–13. <https://doi.org/10.1371/journal.pone.0272496>
- Opara, M., Klen, K. K., & Kozinc, Ž. (2023). Impostor Syndrome in Physiotherapy Students: Effects of Gender, Year of Study and Clinical Work Experience. *Sport Mont*, 21(1), 37–42. <https://doi.org/10.26773/smj.230206>
- Rice, J., Rosario-Williams, B., Williams, F., West-Livingston, L., Savage, D., Wilensky, J. A., & Landry, A. (2023). Impostor syndrome among minority medical students who are underrepresented in medicine. *Journal of the National Medical Association*, 115(2), 191–198. <https://doi.org/10.1016/j.jnma.2023.01.012>
- Shinawatra, P., Kasirawat, C., Khunanon, P., Boonchan, S., Sangla, S., Maneeton, B., Maneeton, N., & Kawilapat, S. (2023). Exploring Factors Affecting Impostor Syndrome among Undergraduate Clinical Medical Students at Chiang Mai University, Thailand: A Cross-Sectional Study. *Behavioral Sciences*, 13(12). <https://doi.org/10.3390/bs13120976>
- Soares, A. K. S., Nascimento, E. F. do, & Cavalcanti, T. M. (2021). Fenômeno do Impostor e Perfeccionismo: Avaliando o Papel Mediador da Autoestima. *Estudos e Pesquisas Em Psicologia*, 21(1), 116–135. <https://doi.org/10.12957/epp.2021.59373>
- Sverdlik, A., Hall, N. C., & McAlpine, L. (2020). Phd impostor syndrome: Exploring antecedents, consequences, and implications for doctoral well-being. *International Journal of Doctoral Studies*, 15, 737–758. <https://doi.org/10.28945/4670>
- Wang, K. T., Sheveleva, M. S., & Permyakova, T. M. (2019). Impostor syndrome among Russian students: The link between perfectionism and psychological distress. *Personality and Individual Differences*, 143(February), 1–6. <https://doi.org/10.1016/j.paid.2019.02.005>
- Wei, Z., Li, Y., Liu, L., Wu, X., Qiao, Z., & Wang, W. (2024). You are worth it: Social support buffered the relation between impostor syndrome and suicidal ideation. *Journal of Pacific Rim Psychology*, 18(19). <https://doi.org/10.1177/18344909241228471>

### **Acknowledgment**

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

### **Conflict of Interest**

The author(s) declared no conflict of interest.

**How to cite this article:** Saputri, M. D. & Khoirunnisa, M. (2024). Factors that Contribute to Individuals Experiencing Impostor Syndrome: A Systematic Review. *International Journal of Indian Psychology*, 12(4), 141-149. DIP:18.01.015.20241204, DOI:10.25215/1204.015