Perfectionism and Self-handicapping as predictors of Impostorism

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Abstract

Impostorism refers to the internal experience of believing that you are not as competent as others perceive you to be. It involves feelings of self-doubt and a persistent fear of being exposed as a "fraud," despite evident success and achievements. People experiencing impostorism often attribute their accomplishments to luck or external factors rather than their own skills and effort. People with impostor feelings have self-doubt regarding their success and have constant fears of being exposed as impostor. Reasons of impostorism lies in traits like perfectionism and self-handicapping because such traits lead students to overthink their success and hence leads to impostor feeling. Present study deals with such aspects and tries to find the relationship of perfectionism and self-handicapping with impostorism. Total sample (Purposive) of 100 students of professional courses including both males and females in age-range of 18-25 years from various IITs of India. Scales used in present study are Clance's IP scale (CIPS), The Big Three Perfectionism Scale (BTPS) (Martin M. Smith, 2016) and Self-Handicapping scale (SHS) (Rhodewalt, 1990). Current study shows moderate levels of impostorism and self-handicapping. Self-handicapping and self-criticism are found as strong predictors of impostorism.

'Keywords': 'Impostorism, perfectionism, and self-handicapping'.

Impostorism among students is a common psychological phenomenon marked by continuous selfdoubt and a persistent fear of being exposed as a fraud, and attributing success to external factors rather than one's abilities. It's particularly common among high-achieving students and can significantly impact their academic performance, mental health, and overall well-being. Impostorism among students is widespread across various educational levels, from high school to graduate school. The pressure to excel academically, comparisons with peers, and high expectations from oneself and others contribute to the development of impostor feelings. Additionally, transitioning to a new academic environment, such as entering college, can exacerbate these feelings due to increased challenges and higher competition. Predisposing traits of personality, notably 'neuroticism and perfectionism', are believed to significantly contribute to the development of impostorism. These traits are supposed to be relatively stable and play a role in shaping an individual's cognitive schema. Research within the psychological literature highlights the impact of these traits on fostering feelings of impostorism, serving as foundational elements contributing to this phenomenon. Perfectionism, particularly the maladaptive form characterized by excessively high standards and a relentless pursuit of flawlessness, has been linked to the emergence of impostorism. Those with perfectionistic tendencies set unattainably high goals, leading to chronic self-doubt and an inability to internalize their accomplishments. Consequently, they attribute success to external factors and constantly fear failing to meet their unreasonably high standards, perpetuating the impostor phenomenon. Perfectionism is commonly described as the pursuit of high standards coupled with continuous, excessively critical self-evaluations (Curran & Hill, 2019). While conventionally regarded as a one-dimensional concept, numerous researchers assert that perfectionism constitutes a multi-dimensional construct,

encompassing both adaptive and maladaptive dimensions '(Flett & Hewitt, 2014; Frost et al., 1990; Hamachek, 1978; Hewitt & Flett, 1991; Slaney et al., 2001; Stairs et al., 2012; Stoeber & Otto, 2006)'.

Wang et al. (2019) conducted a study that revealed a significant mediation effect of impostorism in the relationship between perfectionism, depression, and anxiety. Their findings indicated that experiences of impostorism played a mediating role, meaning that perfectionism was highly likely to contribute to higher levels of depression and anxiety in individuals who scored high on measures of impostorism.

Fraenza (2016) conducted a study focusing on graduate students and concluded that sociallyprescribed perfectionism containes a social aspect. Her research suggested that social influences, particularly from peers and teachers, could contribute to the development of impostorism among individuals experiencing socially prescribed perfectionism.

Mount and Tardanico (2014) proposed that individuals with perfectionistic tendencies seek a certain sense of security before making decisions. They suggested that due to the fear of failure, perfectionists often exhibit two distinct behavioral patterns: either an inclination to be excessively over-prepared or a tendency to procrastinate. Both of these responses to the fear of failure can contribute to the development of impostor fears.

In their study, Ferrari and Thompson (2006) delved into the association between impostor fears and perfectionist self-presentation among 165 undergraduate students. Their findings revealed a moderate correlation between impostor fears and various aspects of perfectionist self-presentation. These results suggest that individuals experiencing impostor fears feel a strong urge to portray themselves as capable, competent, and successful in order to garner respect and admiration from others. Moreover, they strive to conceal any perceived imperfections by avoiding situations that might reveal their personal limitations to others. These characteristics observed in individuals grappling with impostor feelings closely parallel traits found in perfectionists.

Henning et al. (1998) investigated the impact of socially prescribed perfectionism and impostor feelings on the psychological distress experienced by students in nursing, pharmacy, and medical fields. Their findings revealed that both socially prescribed perfectionism and impostor feelings collectively accounted for 36% of the variance in the psychological distress reported by these students.

Cowman and Ferrari (2002), it was revealed that the fear of being exposed as unworthy or incompetent propels impostors towards perfectionism in their work. Individuals experiencing impostor feelings tend to be driven by the relentless fear of being unmasked as inadequate or undeserving of their achievements. Consequently, they adopt behaviors characterized by excessive efforts to meet exceptionally high standards.

Self-handicapping refers to the practice of preemptively creating excuses or attributing potential failures or expected poor performance to external factors. For instance, if a student claims, "I might not perform well on the Psychology test because I'm sick," they can subsequently attribute a low grade to the illness rather than acknowledging their potential lack of skill or preparation. This behavior allows individuals to avoid taking responsibility for their outcomes by providing a ready-made excuse. This self-defeating conduct involves avoiding exerting effort or taking ownership of one's actions. By employing self-handicapping strategies, individuals protect their self-esteem in the event of failure by attributing their shortcomings to external circumstances rather than acknowledging their own abilities or level of preparation. Ultimately, self-handicapping undermines personal growth and accountability, hindering the development of effective coping strategies and adaptive responses to challenges.

In their study involving 165 undergraduate students (comprising 113 females and 52 males), Ferrari and Thompson (2006) investigated the connections between impostor fears, self-handicapping Page | 64 Copyright @ 2024 Author

tendencies, and concerns related to self-presentation. The findings of their research indicated a significant association between impostor fears and both self-handicapping behavior and self-presentational concerns among the participants.

In their study involving 946 university students, Jensen and Deemer (2020) sought to explore the connections between attachment styles, self-handicapping behaviors, and the impostor phenomenon. Their research yielded significant findings, revealing a notable association among attachment styles, self-handicapping tendencies, and the impostor phenomenon. This study's outcomes underscored the interrelated nature of attachment styles, self-handicapping tendencies, and the impostor phenomenon, indicating that the way individuals form attachment patterns might influence their propensity to adopt self-handicapping strategies. Furthermore, the findings suggested that attachment styles might also play a role in the development or experience of impostor feelings among university students.

In a study conducted by Wang and Kleitman (2005) involving 115 participants from diverse backgrounds, including doctors, graduate students, and business executives, the research findings unveiled a noteworthy discovery. The study revealed a significant and positive correlation between self-handicapping behaviors and the impostor phenomenon. Their research indicated that individuals who exhibited tendencies towards self-handicapping, a behavior characterized by creating excuses or impediments to rationalize potential failures, were more likely to also experience the impostor phenomenon. This association suggests that those who engage in self-handicapping strategies, irrespective of their professional backgrounds, are more prone to experiencing feelings of being an impostor despite evidence of competence or success in their respective fields.

In a study conducted by Cowman and Ferrari (2002) involving 436 college students, the aim was to explore the association between self-handicapping behaviors and the impostor phenomenon. The findings from the study revealed a significant positive relationship between self-handicapping tendencies and the impostor phenomenon among the participants. The research outcomes indicated that individuals who exhibited self-handicapping behaviors were more likely to experience feelings and characteristics associated with the impostor phenomenon. Specifically, the study highlighted that impostor tendencies were most accurately predicted by two aspects: behavioral self-handicapping and a disposition toward experiencing shame-prone affect.

In a study conducted by Ross et al. (2000) involving 129 college students, the aim was to investigate the connections among personality factors, self-handicapping behaviors, and their collective contribution in predicting the impostor phenomenon. The research findings revealed several significant relationships between these variables. The study highlighted a positive relationship between selfhandicapping tendencies and the impostor phenomenon. Additionally, two personality factors, neuroticism and fear of failure, exhibited positive correlations with the impostor phenomenon. This suggests that individuals with higher levels of neuroticism and a heightened fear of failure were more prone to experiencing feelings associated with being an impostor.

Even amid diligent effort and academic success, students often find themselves subjected to continuous assessments regarding the acquisition of new skills. This perpetual cycle of evaluation engenders a pervasive sense of uncertainty within them, casting doubt on their abilities. Consequently, these individuals grapple with a persistent fear of being unmasked or exposed as fraudulent, despite their demonstrated competence and achievements. There is a dearth of research conducted in Indian settings regarding impostorism, necessitating further studies to determine its prevalence and the factors that predict or contribute to it among Indian students. Given the substantial impact impostorism can have on students' lives, it is imperative to conduct additional research to elucidate the connections between impostorism and various factors, such as perfectionism and self-handicapping. More comprehensive

investigations are required to discern how these elements interrelate with impostorism among students in the Indian context.

Objective

- To assess and explore the relationship of Impostorism with perfectionism and self-handicapping.
- To find out the predicting power of perfectionism and self-handicapping with regards to Impostorism.

Method

Design

A correlational design was used in the study.

Sample

A purposive sample of 100 professional students including both males and females within age range of 18-25 years from engineering institutes of India.

Tools

1) Clance's IP Scale (CIPS) (Clance, 1985)

The Clance Impostor Phenomenon Scale (CIPS) is a 20-item unidimensional scale designed to gauge the degree to which individuals encounter impostor fears. Respondents express their level of agreement with items using a 5-point scale, ranging from 1 (not at all true) to 5 (very true). A higher score on the scale indicates a more frequent and significant interference of the Impostor Phenomenon in an individual's life. The reliability of the CIPS is established through high internal consistency, demonstrated by alpha coefficients ranging between 0.84 and 0.96 in various studies. Specifically, the coefficient alpha for the scale was determined to be 0.91, indicating strong internal consistency and reliability in measuring impostor experiences.

2) The Big Three Perfectionism Scale (BTPS) (Martin M. Smith, 2016)

It is a 45-item measure to which participants respond on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The BTPS consists of 10 facets (self-oriented perfectionism, self-worth contingencies, concern over mistakes, doubts about actions, self-criticism, socially prescribed perfectionism, other-oriented perfectionism, hypercriticism, entitlement, and grandiosity) which make 3 global factors (rigid perfectionism, self-critical perfectionism, and narcissistic perfectionism). Sum of scores of 10 facets gives score of rigid, self-critical, and narcissistic perfectionism and higher score indicates higher tendencies of perfectionism. Cronbach's alpha ranged from .79 to .89 for the 10 facets and from .92 to .93 for the three global factors.

3) Self-Handicapping scale (SHS) (Rhodewalt, 1990)

It is 25 item scale which assess self-handicapping as one dimension. The SH Scale is a 6- point Likert scale (0 = agree very much to 5 = disagree very much), and it measures individual differences in the tendency to use self-handicapping behaviors and scale provides a total score of

self-handicapping tendencies. Higher score indicates the higher self-handicapping tendencies. Reliability of scale is .84.

Procedure

Students from various engineering departments across different IITs in India were contacted. A connection was established with them, and they were briefed about the study. Upon obtaining their consent, hard copies of the questionnaire were distributed to them. Detailed instructions regarding the scales were provided, and participants completed the questionnaire in one session, adhering to the given guidelines. Subsequently, scoring was conducted according to the norms of each scale/questionnaire, and the data was subjected to statistical analysis using SPSS 25.

Results and discussion

The first objective is "To assess and explore the relationship of impostorism with perfectionism and self-handicapping", Descriptive statistics including mean and SD, and Pearson correlation analysis was calculated and shown in Table 1 and Table 2 repectively.

Table 1

Variables		Mean	SD
Impostorism		54.11	12.71
	SOP	14.78	3.97
	SWC	13.05	4.57
	COM	15.35	4.35
	DAA	13.85	4.31
	SC	11.17	3.61
Perfectionism	SPP	11.46	3.43
	OOP	12.75	4.83
	HC	9.88	3.62
	ENT	10.16	3.18
	GRAN	11.78	3.11
	Rigid	27.88	8.15
	Self-criticisms	51.52	13.56
	Narcissism	44.55	12.40
Self-handicapping		70.54	17.78

Mean and SD of Impostorism, perfectionism (its domains), and self-handicapping.

Table 2

Correlation of Impostorism with perfectionism (its domains) and self-handicapping.

		Impostorism
	SOP	.603**
	SWC	.682**
	COM	.709**
	DAA	.698**
Perfectionism	SC	.698** .654**
	SPP	.584**
	OOP	.495**
	HC	.507**

	ENT	.690**
	GRAN	.292**
	Rigid	.690**
	Self-criticism	.711**
	Narcissism	.600**
Self-handicapping		.728**
**0 1. 0 1.	1	0.011 $1(0.111)$

**Correlation found to be significant at the 0.01 level (2-tailed).

The table 1, results indicate that the students have mean score of 54.11 for impostorism which shows the moderate levels of impostor feelings among students might be resulting because of early family interaction or parental expectations (Clance and Imes, 1978). Going further the students have a mean score of 27.89 for rigid perfectionism scale which comprises of self-oriented perfectionism (SOP) and self-worth contingencies (SWC) which is slightly above average indicating students moderately adapt to rigid perfectionism. Students have mean score of 51.52 for self-critical perfectionism scale which comprises of Concern over mistakes (COM), Doubts about actions (DAA), Self-criticism (SC), and Socially-prescribed perfectionism (SPP) which is again slightly above average showing that students have slightly above average tendencies to have self-critical perfectionism. Students have mean score of 44.55 for narcissistic perfectionism which comprises Other-oriented perfectionism (OOP), Hypercriticism (HC), Entitlement (ENT), and Grandiosity (GRAN) which is slightly below the average indicating students have below average tendencies to have narcissistic perfectionism style. Students develop perfectionism traits usually due to family expectations and continuous increase in competition (Henning. K., et. al., 1998). Students have mean score of 70.54 for self-handicapping indicates that students show higher tendencies of self-handicapping in their daily life resulted due to daily life challenges and competition in studies (Berglas, S., et. al., 1978).

Further, from table no.2, the results shows that impostorism has strong positive and significant (0.690, p<0.01) correlation with rigid perfectionism. Looking further at results we can see that all lower order facets of rigid perfectionism (self-oriented perfectionism and self-worth contingencies) are also positively significantly correlated as r (.603 and .682, p<0.01) respectively. Impostorism shows strong positive correlation (0.711, p<0.01) with self-critical perfectionism along with its lower order facet i.e., concern over mistakes (0.709, p<0.01), doubts about actions (0.698, p<0.01), self-criticism (0.654, p<0.01), and socially-prescribed perfectionism (0.584, p<0.01). Impostorism shows a moderate positive correlation with narcissistic perfectionism (.600, p<0.01) along with its lower order facets i.e., other-oriented perfectionism (0.495, p<0.01), hypercriticism (0.507, p<0.01), entitlement (0.690, p<0.01) except grandiosity which shows a weaker but positive correlation (0.292, p<0.01) with impostorism (Henning. K., et. al., 1998; Thomas, M., et. al., 2020). Impostorism also shows a strong positive correlation (0.728, p<0.01) with self-handicapping (Shaun E. Cowman, et. al., 2002).

Now coming to second objective of the study i.e., to find predictors of impostorism. The results are represented in table 3.

Table 3

Stepwise multiple regression for predicting impostorism from perfectionism (its domains) and self-handicapping

Model Dependent Independent R R ² variable variable	Std. Standardized F Significant error of coefficients level the Beta estimate
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1.	Impostorism	Self- handicapping	.728	.531	8.72	.728	312.87	.001
2.		Self- handicapping				.445	147.75	.001
		Self- criticism	.766	.587	8.19	.369		

Table no.3 contain results that indicate self-handicapping emerged as strong predictor of impostorism (F=312.87, p<0.01). The R square value is .531 which shows 53.1% variance in impostorism accounted by self-handicapping, whereas β -value is .728 shows 72.8% increment in impostor feelings with 1 unit self-handicapping increased. (Julie Want & Sabina Kleitman, 2006)

Going ahead, in model 2, self-criticism is found to be significant predictor (F=147.75, p<0.01) of impostorism. The R-square (0.587) reveals that both self-handicapping and self-criticism are accounted for 58.7% variance in impostorism, while β value (0.369) reveals 36.9% increment in impostorism with 1 unit increased of self-criticism. (Ferrari, J. R., & Thompson, T., 2006).

Conclusion

The aim of the study was to find the relationship of impostorism with perfectionism and self-handicapping. Current findings match the results of previous findings where impostorism is found to be significantly correlated with perfectionism (Henning. K., et. al., 1998; Thomas, M., et. al., 2020) and self-handicapping (Shaun E. Cowman, et. al., 2002). Showing that in daily life where students experience stress in studies and stress due to tough competition leads students towards perfectionistic and self-handicapping traits which can result in development of imposter feeling among children (Julie Want & Sabina Kleitman, 2006; Ferrari, J. R., & Thompson, T., 2006). In early family interaction it is seen in Indian setting that parents put too much pressure on their children and have very high expectations when it comes to studies and due to which students tries to do every thing perfectly to achieve success and hence when perfectionistic traits become negative it might lead to self-handicapping and as we see in present study both traits lead to development of impostor feelings among students. Hence students be given be given positive feedbacks on their results so that they can move towards their goals with positive mindset and avoid negative aspects of perfectionism and self-handicapping. Students should be nurtured in a positive environment where they can choose their decisions freely and can take responsibilities of their success and failure.

References

Allison, P.D. (199). Multiple regression: a primer. London: SAGE Publications.

Bechtoldt, M. N. (2015). Wanted: Self-doubting employees—Managers scoring positively on impostorism favor insecure employees in task delegation. *Personality and Individual Differences, 86*, 482–486. http://dx.doi.org/10.1016/j.paid.2015.07.002

Bernard, N. S., Dollinger, S. J., & Ramaniah, N. V. (2002). Applying the big five personality factors to the impostor phenomenon. *Journal of Personality Assessment*, *78*, 221–233. doi:10.1207/S15327752JPA7802_07

Blondeau, L. A., & Awad, G. H. (2016). The relation of the impostor phenomenon to future intentions of mathematics-related school and work. *Journal of Career Development*, 1–15. http://dx.doi.org/10.1177/0894845316680769

Burnett, E. G. (1998). Family unpredictability, parental alcoholism and the development of parentification. Unpublished doctoral dissertation, Georgia School of Professional Psychology, Argosy University, Atlanta.

Burnett, E. G., Jones, R., Bliwise, N., & Ross, L. T. (2002, March). Family unpredictability, parental alcoholism and the development of parentification. Poster presented at the Southeastern Psychological Association Annual Meeting, Orlando, Florida.

Burt, A. (1992). Generational boundary distortions: Implications for object relations development. Unpublished doctoral dissertation, Georgia State University, Atlanta

Bernard, N. S., Dollinger, S. J., & Ramaniah, N. V. (2002). Applying the big five personality factors to the impostor phenomenon. *Journal of Personality Assessment*, *78*, 221–233. doi:10.1207/S15327752JPA7802_07

Bussotti, C. (1990). The impostor phenomenon: Family roles and environment. (Unpublished doctoral dissertation). Georgia State University, Atlanta, GA. Caselman, T. D., Self, P. A., & Self, A. L. (2006).

Castro, D. M., Jones, R. A., & Mirsalimi, H. (2004). Parentification and the impostor phenomenon: An empirical investigation. *American Journal of Family Therapy*, *32*, 205–216. doi:10.1080/01926180490425676

Clance, P. R. (1985). *The impostor phenomenon: Overcoming the fear that haunts your success.* Atlanta, GA: Peachtree Publishers.

Clance, P. R. (1986). The impostor phenomenon: When success makes you feel like a fake. Atlanta, GA: Bantam.

Clance, P. R., Dingman, D., Reviere, S. L., & Stober, D. R. (1995). Impostor phenomenon in an interpersonal/social context: Origins and treatment. *Women & Therapy*, *16*, 79–96. doi:10.1300/J015v16n04_07

Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. Psychotherapy: *Theory, Research & Practice, 15*, 241–247. doi:10.1037/h0086006

Clance, P. R., & O'Toole, M. A. (1987). The imposter phenomenon: An internal barrier to empowerment and achievement. *Women & Therapy*, *6*, 51–64. doi:10.1300/J015V06N03_05

Cowman, S. E., & Ferrari, J. R. (2002). "Am I for real?" Predicting imposter tendencies from self-handicapping and affective components. *Social Behavior and Personality*, *30*, 119–126. doi:10.2224/sbp.2002.30.2.119

Crawford, W. S., Shanine, K. K., Whitman, M. V., & Kacmar, K. M. (2016). Examining the impostor phenomenon and work-family conflict. *Journal of Managerial Psychology*, *31*, 375–390. http://dx.doi.org/10.1108/JMP-12-2013-0409.

Cromwell, B., Brown, N. W., Sanchez-Huceles, J., & Adair, F. L. (1990). The impostor phenomenon and personality characteristics of high school honor students. *Journal of Social Behavior and Personality*, *5*, 563–573.

Dudău, D. P. (2014). The Relation between Perfectionism and Impostor Phenomenon. *Procedia - Social and Behavioral Sciences*, *127*, 129–133. doi:10.1016/j.sbspro.2014.03.226.

Ferrari, J. R., & Thompson, T. (2006). Impostor fears: Links with self-presentational concerns and self-handicapping behaviours. *Personality and Individual Differences*, 40, 341–352. http://dx.doi.org/10.1016/j.paid.2005.07.012.

Fouladi, R. T., Moller, N. P., & McCarthy, C. J. (2006). Examination of internal consistency and construct validity of scores on the Parental Attachment Scale: Preliminary psychometric results. *Measurement and Evaluation in Counseling and Development*, *39*, 2–30.

French, B. F., Ullrich-French, S. C., & Follman, D. (2008). The psychometric properties of the Clance Impostor Scale. *Personality and Individual Differences*, *44*, 1270–1278. doi:10.1016/j.paid.2007.11.023

Fried-Buchalter, S. (1997). Fear of success, fear of failure, and the imposter phenomenon among male and female marketing managers. *Sex Roles, 37*, 847–859. doi:10.1007/BF02936343

Gibson-Beverly, G., & Schwartz, J. P. (2008). Attachment, entitlement, and the impostor phenomenon in female graduate students. *Journal of College Counseling*, *11*, 119–132. doi:10.1002/j.2161-1882.2008.tb00029.x

Grubb, W. L., & McDowell, W. C. (2012). The imposter phenomenon's impact on citizenship behavior and employee commitment: *Flying under the radar. Journal of Business Issues, 1*, 1–10.

Henning, K., Ey, S., & Shaw, D. (1998). Perfectionism, the impostor phenomenon and psychological adjustment in medical, dental, nursing and pharmacy students. *Medical Education*, *32(5)*, 456–464. doi:10.1046/j.1365-2923.1998.00234.x

Holmes, S. W., Kertay, L., Adamson, L. B., Holland, C. L., & Clance, P. R. (1993). Measuring the imposter phenomenon: A comparison of Clance's IP scale and Harvey's I-P scale. *Journal of Personality Assessment, 60,* 48–59. doi:10.1207/s15327752jpa6001_3.

King, J. E., & Cooley, E. L. (1995). Achievement orientation and the impostor phenomenon among college students. *Contemporary Educational Psychology*, 20, 304–312. doi:10.1006/ceps.1995.1019

Leary, M. R., Patton, K. M., Orlando, A. E., & Wagoner Funk, W. (2000). The impostor phenomenon: Self-perceptions, reflected appraisals, and interpersonal strategies. *Journal of Personality, 68*, 725–756. <u>http://dx.doi.org/10.1111/1467-6494.00114</u>.

Leonhardt, M., Bechtoldt, M. N., & Rohrmann, S. (2017). All impostors aren't alike–Differentiating the impostor phenomenon. *Frontiers in Psychology*, *8*, 1505. <u>http://dx.doi.org/10.3389/fpsyg.2017.01505</u>.

Li, S., Hughes, J. L., & Thu, S. M. (2014). The links between parenting styles and imposter phenomenon. *Psi Chi Journal of Psychological Research*, 19(2), 50-57.

Mackinnon, A. J., Henderson, A. S., Scott, R., & Duncan-Jones, P. (1989). The Parental Bonding Instrument (PBI): An epidemiological study in a general population sample. Psychological Medicine: A *Journal of Research in Psychiatry and the Allied Sciences*, *19*, 1023–1034. doi:10.1017/S0033291700005754.

McDowell, W. C., Grubb, W. L., III, & Geho, P. R. (2015). The impact of self-efficacy and perceived organizational support on the imposter phenomenon. *American Journal of Management*, 15, 23–29.

McElwee, R. O. B., & Yurak, T. J. (2007). Feeling versus acting like an impostor: Real feelings of fraudulence or self-presentation? *Individual Differences Research*, *5*, 201–220.

McGregor, L. N., Gee, D. E., & Posey, K. E. (2008). I feel like a fraud and it depresses me: The relation between the imposter phenomenon and depression. *Social Behavior and Personality*, *36*, 43–48. doi:10.2224/sbp.2008.36.1.43.

Neureiter, M., & Traut-Mattausch, E. (2016). An inner barrier to career development: Preconditions of the impostor phenomenon and consequences for career development. *Frontiers in Psychology*, 7. http://dx.doi.org/10.3389/fpsyg.2016.00048.

Neureiter, M., & Traut-Mattausch, E. (2017). Two sides of the career resources coin: Career adaptability resources and the impostor phenomenon. *Journal of Vocational Behavior, 98*, 56–69. <u>http://dx.doi.org/10.1016/j.jvb.2016.10.002</u>.

Patzak, A., Kollmayer, M., & Schober, B. (2017). Buffering impostor feelings with kindness: The mediating role of self-compassion between gender-role orientation and the impostor phenomenon. *Frontiers in Psychology*, *8*, 1289. http://dx.doi.org/10.3389/ fpsyg.2017.01289.

Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, 52, 1–10. doi:10.1111/j.2044-8341.1979.tb02487.x

Robinson, S. L., & Goodpaster, S. K. (1991). The effects of parental alcoholism on perception of control and imposter phenomenon. Current Psychology: *A Journal for Diverse Perspectives on Diverse Psychological Issues*, *10*(1–2), 113–119. doi:10.1007/BF02686785.

Ross, S. R., & Krukowski, R. A. (2003). The imposter phenomenon and maladaptive personality: Type and trait characteristics. *Personality and Individual Differences*, 34, 477–484. <u>http://dx.doi.org/10.1016/S0191-8869(02)00067-3</u>.

Ross, S. R., Stewart, J., Mugge, M., & Fultz, B. (2001). The imposter phenomenon, achievement dispositions, and the Five Factor Model. *Personality and Individual Differences*, *31*, 1347–1355. doi:10.1016/S0191-8869(00)00228-2.

September, A. N., McCarrey, M., Baranowsky, A., Parent, C., & Schindler, D. (2001). The relation between well-being, imposter feelings, and gender role orientation among Canadian university students. *The Journal of Social Psychology, 141*, 218–232. doi:10.1080/00224540109600548.

Smith, M. M., Saklofske, D. H., Stoeber, J., & Sherry, S. B. (in press). The big three perfectionism scale: A new measure of perfectionism. *Journal of Psychoeducational Assessment*.

Sonnak, C., & Towell, T. (2001). The impostor phenomenon in British university students: Relationships between selfesteem, mental health, parental rearing style, and socioeconomic status. *Personality and Individual Differences, 31*, 863– 874. doi:10.1016/S0191-8869(00)00184-7.

Thompson, T., Davis, H., & Davidson, J. (1998). Attributional and affective responses of impostors to academic success and failure outcomes. *Personality and Individual Differences*, 25, 381–396. doi:10.1016/S0191-8869(98)00065-8.

Want, J., & Kleitman, S. (2006). Imposter phenomenon and self-handicapping: Links with parenting styles and self-confidence. *Personality and Individual Differences*, 40, 961–971. doi:10.1016/j.paid.2005.10.005.