

The Imposter Phenomenon in Higher Education: Incidence and Impact

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Clance (1978) first identified the Impostor Phenomenon in therapeutic sessions with highly successful women who attributed achievements to external factors even in the presence of evidence to the contrary. These individuals, believing themselves unworthy of promotions, recognition and rewards, saw themselves as frauds. Those dealing with impostor tendencies put a considerable amount of pressure on themselves to maintain the façade and as such are known to exhibit high levels of perfectionism and workaholic behaviors. This article reviews the definition and traits associated with the Impostor Phenomenon with a focus on incidence and impact in higher education.

INTRODUCTION

These are difficult times in higher education. Increased competition for students, declining state appropriations (Barnshaw & Dunietz, 2015), ratcheted scrutiny by the federal government and intense pressure to deliver on outcomes within a four-year time frame by accrediting bodies have left many colleges and universities reeling (Howard, 2015; Woodson, 2013). This pressure is complemented by a rampant consumer mentality that has organizations struggling to keep up with student and parental demands for diverse curricula delivered in high-end facilities, which must ultimately lead to job placement (Potter, 2011; Woodson, 2015). Shrinking birth cohorts coupled with population shifts have led to declining enrollments in many colleges and universities. Those who are tuition dependent, particularly private institutions, are feeling the stress more than others, but they are not alone (Edwards, 2015). The vast majority of institutions are working hard to attract new students and retain those who arrive on campus each fall. Under increasing pressures to do more with less in organizations with uncertain wage increases and rising expectations, faculty and staff are considering employment changes (Flaherty, 2013). None can afford to lose highly-valued contributors as budgets tighten. Whether it is the student population or the seasoned high-performing faculty and staff, colleges and universities need to be thinking about retention. The Impostor Phenomenon (IP) has been well documented in the academy and it has the potential to negatively impact an organization's ability to retain students, faculty, and staff alike. Understanding the Impostor Phenomenon can be very helpful in identifying those at risk for leaving. Equally as important, studying trends in addressing IP can curb the flow and create a more inviting environment allowing colleges and universities to retain top performers across the academy.

THE IMPOSTER PHENOMENON

Clance and Imes (1978) utilized the term Impostor Phenomenon to describe the traits and behaviors of a group of high-achieving women who were struggling to internalize their success. These women

described feelings of fraudulence because they did not attribute their success to their own abilities despite many achievements and accolades. Imposters see themselves as unworthy of the level of praise they are receiving because they do not believe they have earned such recognition based on their capabilities, causing heightened levels of anxiety and stress (Clance & Imes, 1978; Cowman & Ferrari, 2002; Harvey & Katz, 1985; Hutchins, 2015; Kets de Vries, 2005).

One might wonder why it is that such accomplished individuals are unable to take ownership of the success that is so clear to others; do they just not hear it? Imposters will point out that they are aware of how others see them but that it is clear to them that the accolades are falsely bestowed because they have not really earned them (Clance, 1985; Sakulku & Alexander, 2015). Those struggling with impostor tendencies will link achievement to a lowering of standards, networking, timing and their charm (Clance & Imes, 1985; Cowman & Ferrari, 2002; Fried-Buchalter, 1997; Kets de Vries, 2005; Kumar & Jagacinski, 2006). Success is attributed instead to presentation skills that allow them to hide the true nature of their performance (Cowman & Ferrari, 2002; Kets de Vries, 2005; Kumar & Jagacinski, 2006; Sakulku & Alexander, 2011). In the mind of the imposter, a very positive but very false impression of ability has been created.

Maintaining this false impression becomes a significant goal. Others, seeing imposters as achievers, recognize a capacity for further growth and send more responsibilities their way knowing the job will be well done. Lack of internalization of past successes, an external locus of control and lack of confidence in replicating past performance accompanied by the increase in visibility, leads to a significant amount of fear often associated with a focus on impression management and self-monitoring behaviors (Ket de Vries, 2005; Kolligian & Sterberg, 1991; Sakulku & Alexander, 2011).

Impostorism, at its root, is about an inability to accurately self-assess with regard to performance (Kets de Vries, 2005; Want & Kleitman, 2006). In addition, diminished self-confidence and self-efficacy is known to accompany impostor tendencies (Dahvlig, 2013). In an article based on five women leading in the faith-based colleges and universities, the author shares a conversation with Christine, an academic administrator who states, "I still don't understand what it is that people see that makes them feel confident in my abilities; it's just my self confidence is still pretty shaken at times when I just stop and think, 'I can't believe I'm doing this'" (Dahvlig, 2013, p.101).

In the face of faltering self-confidence, internalization of failures, and over focus on mistakes over the long term, stress and anxiety become constant companions. As a result, impostors strive to minimize both by working longer, working harder and seeking perfection (Cowman & Ferrari, 2002; Sakulku & Alexander, 2011; Thompson, Foreman, & Martin, 2000). Impostors feel these are the only tools they have to meet expectations. The impostor often over estimates the abilities of others and underestimates the amount of work those individuals put into their success. Reflecting on this leads those with IP tendencies to an extreme emphasis on perfection and effort. As a result, self-inflicted excessive standards for achievement lead to the creation of unrealistic goals that are ultimately unachievable. Long days filled with herculean effort end inevitably in failure and recrimination (Clance, 1985). This accentuates the impostor feelings and fraudulence is exacerbated. In response, the impostor will often exhibit workaholic behaviors leading to exhaustion and increasing the risk for burnout (Cowman & Ferrari, 2002; Kets de Vries, 2005; Kumar & Jagacinski, 2006). Rewards and recognition then become associated with anxiety, stress and work-life balance issues causing the impostor to see both as undesirable (Cowman & Ferrari, 2002; Sakulku & Alexander, 2011). In an effort to decrease the stress, imposters attempt to lower expectations (Leary, Patton, Orlando & Funk, 2000). While Kolligian and Sternberg (1991) reported that IPs tend to utilize humor in the form of self-deprecation to discount praise and positive public acknowledgements denying their established reputation for competence, new research calls into question the motivation for this self-presentation strategy (Ferrari & Thompson, 2006; McElwee and Urak, 2007).

The continued and often mounting pressure to perform in very public venues rise, as does the stress. As a result, imposters will often behave in ways that sabotage success and find little joy in work (Cowman & Ferrari, 2002; Kets de Vries, 2005). New opportunities for development are now often turned down (Clance, 1985). The focus becomes one of maintaining the façade for as long as possible until an escape plan can be formulated. The impostor now has to get out before being found out. This leads to a

decrease in visibility and turning away from support. When able, the imposter begins to retreat to less public positions or withdraws completely.

Prevalence

Most professionals can relate to the feelings of individuals suffering from the Imposter Phenomenon. IP feelings can be especially prevalent as new roles are taken on, especially in first jobs, and can return when new challenges are faced. As Kets de Vries (2005) points out, “To some extent, of course, we are all imposters. We play roles on the stage of life, presenting a public self that differs from the private self we share with intimates and morphing both selves as circumstances demand. Displaying a façade is part and parcel of the human condition” (p. 110). The difference here however is that for the imposter, these feelings never dissipate. Who then is at risk?

The research findings regarding the incidence of IP in the sexes has been mixed. While early work in IP centered on its prevalence in professional women (Clance & Imes, 1978; Harvey & Katz, 1985), a significantly higher mean IP score for men was reported in a sample of male and female faculty members in a study by Topping (1983). Subsequent research reveals that IP is evident in both men and women (Clark, Vardeman, Barbar, 2014; Cowman & Ferrari, 2002; Cozzarelli & Major, 1990; Kets de Fries, 2005; Kumar & Jagacinski, 2006; September, McCarrey, Baranowsky, Parent & Schindler, 2001; Langford & Clance, 1993).

Imposter Phenomenon has been linked to family background (Castro, Jones, & Mirsalimi 2004; King & Cooley, 1995; Sakulku & Alexander, 2011; Sonnak & Towell, 2001). Harvey and Katz (1985) link IP behaviors in individuals who are first in the family to exceed norms or expectations for success in career, financial, and educational goals. IP manifestations in college-age students has been positively correlated to parentification (Castro et al., 2004) lack of parental care by Sonnak and Towell (2001) and heightened paternal parental control (Li, Hughes, & Thu, 2014; Sonnak & Towell, 2000; Want & Kleitman (2006).

In addition, IP has been linked to those individuals who find themselves in careers where objective measures of success are not always aligned with quality of the product or work such as the creative arts. In professions where one sex is predominating, individuals of the opposite sex are more likely to demonstrate imposter behaviors (Harvey & Katz, 1985). IP has been documented across the professions in a variety of industries including K-12 education, health care, accountancy, finance, law, marketing, and higher education (Arena & Page, 1992; Byrnes & Lester, 1995; Clance & Imes, 1978; Crouch, Powell, Grant, Posner-Cahill & Rose, 1991; Fried-Buchalter, 1997; Huffstutler & Varnell, 2006; Mattie, Gietzen, Davis & Prata, 2008; Parkman & Beard, 2008; Zorn, 2005).

IP and Higher Education

Numerous studies and articles have documented the prevalence of the Imposter Phenomenon in higher education. The research presents IP tendencies in a variety of student populations, in faculty and in staff members. While many perceive the college campus as an oasis of tranquility where intellectual communities strive to seek and share knowledge in a supportive environment the reality in most cases is markedly different. In an interview published in *The McGill Reporter*, Zorn remarked that, “Scholarly isolation, aggressive competitiveness, disciplinary nationalism, a lack of mentoring and the valuation of product over process are rooted in the university culture. Students and faculty alike are particularly susceptible to IP feelings” (from McDevitt, 2006 p. 1). In 2015, Hutchins noted that “Impostor tendencies are alive and well among higher-education faculty...” (p. 2). Given the fact that the academy has not really changed much with regard to structure over the last ten years and the continual creep of the corporatization of the academy remains ever present, it appears IP is here to stay. The research provides insight into areas of commonality and differences between IP in students, faculty and staff.

IP and Faculty

Hutchins (2015) notes that the current work environment in higher education and personality traits of those attracted to it, align rather closely to those factors that contribute to the development of imposter tendencies. The author points out that IP is more often seen in those with advanced degrees, those who

have the traits of conscientiousness, achievement orientation, perfectionistic expectations, and people who work in highly competitive and stressful occupations. Articles, blogs and commentary from faculty members found on the webpage for *The Chronicle of Higher Education* provide anecdotal evidence that supports Hutchins perspective (Bahn, 2014; Gravois, 2007; Kasper, 2013; Webb, 2013). According to Hutchins, imposter traits "... might be further heightened within the 'publish or perish' academic culture where performance targets are often vague, support can be inconsistent, and a highly competitive research and funding climate may inadvertently create a setting conducive to feelings of self-doubt and fraudulence" (2015, p.4).

A small number of studies have been completed investigating IP in faculty members in large tier-one research institutions, small private universities and community colleges (Brems, 1994; Dahlvig, 2013; Hutchins, 2015; Long, Jenkins, & Bracken, 2000). While one study reports a higher incidence in male faculty (Topping, 1983), the majority of the findings demonstrate that there is no clear indication that sex plays a part in determining IP tendencies in faculty. Discipline does not appear to be a factor unless the individual is within the minority with regard to sex. Imposter tendencies have been documented in individuals in a variety of academic roles. In a paper presented by Long, Jenkins, and Bracken (2000), the authors share their collective experiences as working class women negotiating the academy as adjuncts, full-time staff members and in full-time faculty roles. One of the authors states, "I often feel like an 'Impostor'- I describe this as a kid playing dress-up. This is especially noticeable to me when I teach, present, or attend 'official' meetings" (Long et al, 2000, p. 8).

One would expect IP to manifest itself in faculty in ways that are similar to those in other industries. This is most likely to start with a faculty member decreasing interactions with students. Brems, Baldwin, Davis and Namyniuk (1994) state, "Given the interpersonal impact of impostor feelings, their presence may affect how faculty interact with students; how available faculty make themselves to students for advising, supervision, and research activities; and how faculty are rated by students on teaching effectiveness" (p. 184). Apply these behaviors to the classroom and it would not be a far stretch to imagine that faculty struggling with IP tendencies might also lecture more allowing for fewer interactions, and leave class as quickly as possible to avoid answering questions. This notion is supported as Brems et al. (1994) who reported that an instructor's level of encouragement of questions and ideas was negatively linked to IP tendencies and that as IP scores decreased the number of advisees increased. These behaviors have the potential to negatively impact teaching evaluations and perceptions of teaching effectiveness.

The desire to lessen visibility is in all likelihood not only seen in teaching and advising. Scholarship might also be impacted. Research activities that lead to public scrutiny such as publication and presentation might become too heavily weighted with the fear of being found out to continue. Similar behavior could be seen in committee work. While the IP might not mind serving on a committee, it is hard to imagine he or she would want to be in the position of reporting to the faculty on committee work. These potential negative outcomes in the area of scholarship, service and teaching combined with the positive correlation of IP with faculty exhaustion (Hutchins, 2015) set the stage for a host of unattractive outcomes for the faculty member and the organization.

IP and Staff

Of course organizational practices, policies and climate do not affect faculty alone. Members of the administrative staff, with or without faculty appointment, are also impacted and arguably more so given the nature of the appointments. Publications regarding IP in staff roles include librarians (Clark, Vardeman and Barba, 2014; Faulkner, 2015; Gordon, 2003), academic deans, and those working in professional administrative functions in finance, human services, student life and adult education (Crouch, Powel, Grant, Posner-Cahill, & Rose, 1991; Dahlvig, 2013; Long, et al., 2000). Clark et al. (2014) studied the Impostor Phenomenon in college and research librarians. While differences between gender scores were not significant, "The combination of the IP scale scores and the short-answer responses paint an overall picture of the prevalence of IP feelings" (p.259). The authors report that one in eight academic librarians in the sample have IP scores above the benchmark. Respondents describe a "...tendency to second-guess their work, to strive excessively for perfection, and to hesitate to stand up

for themselves and share their opinions” (Clark et al., 2014, p. 264). In the study, findings include reports of procrastination behaviors, stress, anxiety and demotivation. Short-answer responses tend to support the concerns articulated by Hutchins (2015) about climate and culture. According to Clark et al., “While library organizations may not necessarily cause IP feelings, survey respondents perceived that the culture fosters those feelings” (p. 264).

Vergauwe, Wille, Feys, DeFruyt and Anseel (2014) were particularly interested in how IP traits might be related to work outcomes. The authors report that those individuals who have significant levels of impostor behaviors and as such are living with the fear of exposure, are more likely to be dissatisfied with their jobs and report less organizational citizenship behaviors. Dissatisfied and withdrawn, the IP does not always move on because leaving seemed too daunting. In their study, Vergauwe et al. (2014) note that while organizational commitment increased in those with IP tendencies, “It is possible that they are highly engaged in their job, to prevent them from being exposed as incompetent, which could make their identification with their organization stronger in the long term” (p.14).

IP and Students

Numerous studies document the prevalence of the Impostor Phenomenon in the both graduate and undergraduate student populations. At the undergraduate level, IP has been documented across a variety of majors and disciplines to include psychology (Ferrari & Thompson, 2006), engineering (Felder, 1988), medical, dental, nursing and pharmacy students (Henning, Ey & Shaw, 1998). Publications discussing IP at the graduate level can be found regarding students in physician assistant studies (Mattie, Gietzen, Davis & Prata, 2008; Prata & Gietzen, 2007), psychology (Bernard, Dollinger & Ramaniah, 2002; Castro, Jones, & Mirasalimi, 2004; Gibson-Beverly & Schwartz, 2008) nurse practitioner (Huffstutler & Varnell, 2006; Sutliff, 1998; Vance, 2002), medical residency (Legassi, Zibrowski, & Goldszmidt, 2008; Oriol, Plane & Mundt, 2004), molecular biology (Pinker, 2009), and in doctoral programs (Gibson-Beverly & Schwartz, 2008; Long, Jenkins & Bracken, 2000). As Junia Mason (2009) describes it, “As a doctoral student in education, there are times when I feel as if I am living in the uncomfortable skin of someone who is seeking validation for the right to grace the halls of academia” (p.17).

IP impacts not only those who move through college and post graduate work directly out of high school, but also is an issue for those returning to college. According to Valerie Young (2011) author of *The Secret Thoughts of Successful Women*, “Impostors who return to college in midlife have been known to wonder out loud if perhaps their professors aren’t just taking pity on them. Knowing they’re trying to juggle kids, a job, and school, they suspect that their professors are intentionally going easy on them” (p. 19).

Positive correlations have been documented between IP and academic success (Harvey, 1981; Thompson, Davis & Davidson, 1998), evaluation anxiety (Cozzarelli & Major, 1990; Cusak, Hughes, & Nuhu, 2013; Kumar & Jagacinski, 2006; Thompson et al., 1998), neuroticism (Bernard et al., 2002), achievement orientation (King & Cooley, 1995) and perfectionism (Cusak, et al., 2013; Ferrari & Thompson, 2006; Leung, 2006). Negative correlations are described between IP and self-esteem (Cusak, et al., 2013; Kolligan & Sternberg, 1991; Leary, et al., 2000; McElwee & Yurak, 2007), academic self-efficacy (Thompson, et al., 1998) and academic dishonesty (Ferrari, 2005).

Some might intuit that the fear of failure and high levels of stress caused by the persistent self-doubt might lead to behaviors linked with cheating. Joseph Ferrari’s (2005) study of 124 undergraduate students challenges that notion. The author found “...that the academic success of impostors is less likely to be due to dishonest academic practices” (Ferrari, 2005, p. 16). In the author’s study results demonstrate that it is the student without impostor tendencies who is more likely to have issues with plagiarism and cheating to pass exams.

Researchers looking at the relationship between IP and mental health in the student population have found IP to be a predictor of mental health (Cokely, McClaine, Enciso, & Martinez, 2013). More specifically, IP has been positively correlated with anxiety (Clance & O’Toole, 1987; Cromwell et al., 1990; Cokely et al., 2013; Cusak, et al., 2013; Oriol et al., 2004; Sonnack & Towell, 2001; Thompson et al., 1998), depression (Austin, Clarke, Ross & Taylor, 2009; Bernard et al., 2002; Clance & Imes, 1978;

Harvey & Katz, 1985; McGregor et al., 2008; Steinberg, 1987; Thompson, et al., 1998), psychological distress (Henning et al., 1998) and minority student status stress (Cokely, et al., 2013).

Research indicates that IP scores are higher for students in minority populations as a group. Cokely, McClain, Enciso and Martinez (2013) designed a study that allowed them to compare IP and Minority Student Status Stress (MSSS) across a group of students in three distinct minority groups: African American, Asian, and Latino. While the authors found African American students reported experiencing the highest level of minority student status stress, imposter feelings were significantly higher for Asian American students than any other group in the study. In Cokely et al., (2013) found that there was a strong correlation with both MSSS and IP with psychological stress and psychological well-being for all three minority groups. Findings demonstrate that it was IP that was the strongest predictor for each. The authors suggest that, "It is probably the case that ethnic minority students on a predominantly White campus share an ethnic minority experience that can be stressful" (Cokely, et al., 2013, p. 93). To address this matter, recommendations are made to counselors working with ethnic minority students to address the common stressors experienced by individuals who are not a part of the dominant group on campus in programming.

RECOMMENDATIONS

The predictive nature of IP with regard to mental health status in student populations has drawn much attention recently due to concerns about the rising number of reported suicides on college campuses. In an effort to keep students safe and boost retention, a number of colleges and universities have developed programming on IP for students. California Technology and MIT have both instituted programs debunking myths about belonging, helping students identify IP tendencies, and focusing on support programming. In a number of colleges, Imposter programming has become a part of orientation events for undergraduate and graduate students. The offices of student life, academic success, multi-cultural affairs and counseling have worked to develop workshops for all students helping them to define success, identify strengths, deal with failures, understand perfectionism and set more reasonable expectations for themselves (Cokely, et al., 2013).

Similar programs have been developed for faculty and staff. Huffstutler and Varnell (2004) encourage the development of peer group programming, mentoring opportunities, and identification of organizational expectations, especially those that produce high levels of anxiety. While IP has become a topic for orientation workshops focusing on awareness and support, some have built IP discussions throughout the first year for all new employees with breakout sessions for larger groups (faculty/staff/graduate assistants). The Center for Creative Leadership has developed a publication titled *Beating the Impostor Syndrome* (Mount & Tardanico, 2014) that would serve well as a resource for orientation workshops. Joyce Roche's 2013 book, *The Empress Has No Clothes* and Valerie Young's book, *The Secret Thoughts of Successful Women* offer perspectives that might resonate with both men and women. It has been suggested that enhancement of perception of workplace social support can ease some of the impact of Impostorism (Vergauwe et al., 2014). Other recommendations have included the implementation of multifaceted structured feedback systems (Cogner & Fulmer, 2004), careful selection of mentors (Huffstutler & Varnell, 2006; Leung, 2006) and clearly designed expectations with organizationally appropriate boundaries (Crumpacker & Crumpacker, 2007; Hutchins, 2015; Kets de Vries, 2005; Vergauwe et al., 2014).

SUMMARY

Evidence exists that supports Hutchins (2015) claim that the Impostor Phenomenon is alive and well on college campuses. While more empirical research is necessary to fully understand IP, particularly with regard to faculty and staff, there is enough documentation to support the integration of programming on campus and reflection upon how the academy feeds it. In a blog post, Richard Sigurdson (2008), the Dean of Arts at the University of Manitoba, encouraged a consideration of how climate and culture on our

campuses might be enhancing IP tendencies in our students, faculty and staff. Dean et al. (2009) point out that any reflection on culture should begin with the understanding that students, faculty and staff are all socialized into the academy and as a result culture shapes scholarship and work lives. In a February 2014 blog posted on *The Chronicle of Education* "The Conversation" webpage, David Leonard notes the negative impact of culture with regard to IP stating, "It is crucial to note that Impostor Syndrome stems not just from the mismatch between the representation of an academic and one's identity, but also from the daily experiences in which faculty, students, and administrators convey that you don't belong, or that you don't have what it takes".

The discussion of culture and IP can lead to changes in policy, programming, and campus morale. These changes have the potential to positively impact the academy's ability to retain students, staff and faculty. There is general acceptance that the landscape of higher education is rapidly changing in response to the tremendous pressures being put upon it to transform in order to survive (Edwards, 2015; Howard, 2015; Potter, 2011). While a healthy debate can be constructed about those pressures and change initiatives aligned with them, all could agree that anything we can do to retain our best and brightest in the academy is a worthy cause. Attention to the impostor phenomenon and its impact is a place to start.

REFERENCES

- Arena, D., Page, N. (1992). The impostor phenomenon in the clinical nurse specialist role. *Journal of Nursing Scholarship*, 24(2), 121-125.
- Austin, C. C., Clarke, E. M., Ross, M. J., & Taylor, M. J. (2009). Impostorism as a mediator between survivor guilt and depression in a sample of African American college students. *College Student Journal*, 43(3), 1094-1109.
- Bahn, K. (2014). Women, academe, and impostor syndrome. *Chronicle of Higher Education*, 60(30), A51.
- Barnshaw, J., & Dunietz, S. (2015) Busting the myths. *Academe*, 101(2), 4-84.
- 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(2), 321-333.
- Brems, C., Baldwin, M. R., Davis, L., Namyniuk, L. (1994). The impostor syndrome as related to teaching evaluations and advising relationships of university faculty members. *The Journal of Higher Education*, 65(2), 183.
- Byrnes, K. D., & Lester, D., (1995). The impostor phenomenon in teachers and accountants. *Psychological Reports*, 77(1), 350.
- Caselman, T. D. (2003) The impostor phenomenon among American and Japanese adolescents: Gender, self-perception, self-concept, and social support variables. Dissertation Abstracts International, 646B.
- Castro, D., Jones, R., & Mirsalimi, H. (2004). Parentification and the impostor phenomenon: An empirical investigation. *American Journal of Family Therapy*, 32, 2005-216.
- Clance, P.R. (1985). *The impostor phenomenon: Overcoming the fear that haunts your success*, Atlanta, GA: Peachtree.
- Clance, P.R., & Imes, S. A. (1978). The impostor phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research, and Practice*, 15(3), 241-247.
- Clance, P.R., O'Toole, M.A. (1985) The impostor phenomenon: An internal barrier to empowerment & achievement in the impostor phenomenon: Overcoming the fear that haunts your success, Atlanta, GA: Peachtree.
- Clark, M., Vardeman, K., & Barba, S., (2014). Perceived inadequacy: A study of impostor phenomenon among college and research librarians. *College & Research Libraries*. 75(3) 255-271.
- Conger, J., & Fulmer, R. (2004). *Growing your company's leaders: How great organizations use succession management to sustain competitive advantage*. New York, NY: AMACOM.

- Cokley, K., McClain, S., Enciso, A., & Martinez, M., (2013). An examination of the impact of minority status stress and impostor feelings on the mental health of diverse ethnic minority students. *Journal of Multicultural Counseling and Development*, 41(4), 82-95.
- Cowman, S. E., Ferrari, J. R. (2002). "Am I for real?" Predicting impostor tendencies from self-handicapping and affective components. *Social Behavior and Personality*, 30(2), 119-126.
- Cozzarelli, C., & Major B. (1990). Exploring the validity of the impostor phenomenon. *Journal of Social and Clinical Psychology*, 9, 401-417.
- Cromwell, B., Brown, N., Sanchez-Huceles, J., & Adair, F.L. (1990). The impostor phenomenon and personality characteristics of high school honor students. *Journal of Social and Behavior Personality*, 5(6), 563-573
- Crouch, J., Powel, M., Grant, C., Posner-Cahill, C., & Rose, A. (1991). Impostor phenomenon and psychological type among banking and higher education professionals. *Journal of Psychology Type*, 20(1), 34-42.
- Cusack, C. E., Hughes, J. L., & Nuhu, N. (2013). Connecting gender and mental health to impostor phenomenon feelings. *PSI CHI Journal of Psychological Research*, 18(2), 74-81.
- Crumpacker, M. & Crumpacker, J. M. (2007). Succession planning and generational stereotypes: Should HR consider age-based values and attitudes a relevant factor or a passing fad? *Public Personnel Management*, 36, (4), 349-369.
- Dahlvig, J. E. (2013). A narrative study of women leading within the Council for Christian Colleges & Universities, *Christian Higher Education*, 12(1/2), 93-109.
- Dean, D. R., Bracken, S. J., & Allen, J. K. (2009), *Women in academic leadership*. Sterling, VA: Stylus.
- Edwards, M. M., (2015, September 6), Small colleges face big challenges. *The Columbus Dispatch*, 1B, 3B.
- Faulkner, A. E. (2015). Reflections on the impostor phenomenon as a newly qualified academic librarian. *New Review of Academic Librarianship*, 21(3), 265-268. doi:10.1080/13614533.2015.1070185.
- Felder, R. (1988). Imposters everywhere. *Chemical Engineering Education*, 22(4), 168-169.
- Ferrari, J. R., & Thompson, T. (2006) Impostor fears: Links with self-presentational concerns and self-handicapping behaviours. *Personality and Individual Differences*, 40(2), 341-352.
- Ferrari, J.R., (2005). Impostor tendencies and academic dishonesty: Do they cheat their way to success? *Social Behavior and Personality*, 33(1), 11-18.
- Flaherty, C., (July 10, 2013). Wisconsin Stevens Point struggles with high faculty turnover due to lower salaries. *Insider Higher ED* retrieved from <http://insidehighered.com/news/2013/07/10/>
- Fried-Buchalter, S. (1997). Fear of success, fear of failure, and the impostor phenomenon among male and female marketing managers. *Sex Roles*, 37(11/12), 847-859.
- Fried-Buchalter, S. (1992). Fear of success, fear of failure, and the impostor phenomenon: A factor analytic approach to convergent and discriminant validity. *Journal of Academic Personality Assessment*, 58(2), 368-379.
- Gibson-Beverly, G., & Schwartz, J. P., (2008). Attachment, entitlement, and the impostor phenomenon in female graduate students, *Journal of College Counseling*, Fall vol. 11(2), 119-132.
- Gordon, R. S. (2003). Overcoming the systems librarian impostor syndrome, *LIBRES: Library and Information Science Research Electronic Journal*, 13(2).
- Gravois, J. (2007) You're not fooling anyone. *The Chronicle of Higher Education*, 54(11), 1.
- Harvey, J. C., (1981). The impostor phenomenon an achievement: A failure to internalize success (Doctoral dissertation, Temple University). *Dissertation Abstracts International*, 42, 4969B.
- Harvey, J., and Katz, C. (1985). *If I'm so successful, why do I feel like a fake? The impostor phenomenon*. New York, NY: St. Martin's.
- Henning, K., Ey, S., & Shaw, D. (1998). Perfectionism, the impostor phenomenon and psychological adjustment in the medical, dental, nursing, and pharmacy students. *Medical Education*, 32, 456-464.
- Howard, J. (2015). College jobs, never easy, have become pressure cookers. *Chronicle of Higher Education*, 61(41), B4-B9.

- Huffstutler, S. Y., Varnell, G. (2006). The imposter phenomenon in the new nurse practitioner graduates. *Advanced Practice Nursing Journal*, 6(2).
- Hutchins, H. M. (2015). Outing the imposter: A study exploring imposter phenomenon among higher education faculty. *New Horizons in Adult Education & Human Resource Development*, 27(2), 3-12.
- Kasper, J., (2013, April 3). An academic with imposter syndrome. *The Chronicle of Higher Education*, electronic download 10.17.14
- Kets de Vries, M. F. R. (2005). The dangers of feeling like a fake. *Harvard Business Review*, 83(9), 108-116.
- King, J. E., & Cooley, E. L. (1995). Achievement orientation and the impostor phenomenon among college students. *Contemporary, Educational Psychology*: 20(3), 304-312.
- Kolligian, Jr., J., Sternberg, R. J. (1991). Perceived fraudulence in young adults: Is there an “imposter syndrome”? *Journal of Personality Assessment*, 56(2), 308-326.
- Kumar, S., Jagacinski, C. M. (2006). Imposters have goals too: The imposter phenomenon and its relationship to achievement goal theory. *Personality and Individual Differences*, 40(1), 147-157.
- Langford, J., & Clance, P.R. (1993). The imposter phenomenon: Recent research findings regarding dynamics, personality, and family patterns and their implications for treatment. *Psychotherapy*, 30(3), 495-501.
- Laursen, L. (2008, February 15). No, you're not an imposter. *Science Magazine*, Retrieved March 21, 2008, http://sciencecareers.sciencemag.org/career_development/previous_issues/articles
- Leary, M.R., Patton, K.M., Orlando, A. E., & Funk, W. (2000). The imposter phenomenon: Self-perceptions, reflected appraisals, and interpersonal strategies. *Journal of Personality*, 68(4), 725-756.
- Legassi, J., Zibrowski, E.M., & Goldszmidt, M. A. (2008) Measuring resident well-being: Impostorism and burnout syndrome in residency. *Journal of General Internal Medicine*, 23, 1090-1094. Doi: 10.1007/s11606-008-0536-x.
- Leonard, D., (Feb. 2014). Title, The Chronicle of Education, web page blog post The Conversation downloaded Sept. 1 2015.
- Leung, L. (2006). Using perfectionism, imposter phenomenon and occupational field to predict job burnout. In an unpublished thesis. Proquest digital dissertations.
- 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.
- Long, M. L., Jenkins, G. R., & Bracken, S. (2000, October). Impostors in the *Sacred Grove*: Working class women in the academe [70 paragraphs]. *The Qualitative Report* [On-line serial], 5(3/4). Available: <http://www.nova.edu/ssss/QR/QR5-3/long.html>
- Mason, J. (2009). Authentic movement: A slave for imposter phenomenon. *Review of Human Factor Studies*, 15(1), 17-32.
- Mattie, C., Gietzen, J., Davis, S., & Prata, J., (2008). The imposter phenomenon: Self-assessment and competency to perform as a physician assistant in the United States. *The Journal of Physician Assistant Education*, 19(1), 5-12.
- McDevitt, N. (2006, May 18). Unmasking the Imposter phenomenon: Fear of failure paralyzes students and faculty. *The McGill Reporter*, volume 38 (17), p. 1-2.
- McDowell, W.C., Boyd, N.G., & Bowler, W. M. (2007). Overreward and the imposter phenomenon. *Journal of Managerial Issues*, 19(1), 95-110.
- McElwee, R. O., & Yurak, T. J., (2007). Feeling versus acting like an impostor: Real feelings of fraudulence or self-presentation? *Individual Differences Research*, 5(3), 201-220.
- McGregor, L., Gee, D., & Posey, K. (2008). I feel like a fraud and it depresses me: The relation between the imposter phenomenon and depression. *Social Behavior & Personality: An International Journal*, 36, (1) 43-48.
- Mount, P. & Tardanico, S. (2014). *Beating the impostor syndrome*, Greensboro, NC: The Center for Creative Leadership.

- Oriel, K., Plane, M.B., & Mundt, M. (2004). Family medicine residents and the impostor phenomenon. *Family Medicine*, 36, 248-252.
- Parkman, A., & Beard, R., (2009). Succession planning and the imposter phenomenon in higher education. *CUPA-HR Journal*, 59(2), 29-36.
- Pinker, S. (2009). Extra credit. *Psychology Today*, 42(6), 39-40.
- Potter, C. (2011, November 9). On the nature of change in higher education: Assessing the costs. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com>.
- Prata, J., & Gietzen, J., (2007). The imposter phenomenon in physician assistant graduates. *Journal of Physician Assistant Education*, 18(4), 33-36.
- Roche, J. M., & Kopelman, A., (2013). *The empress has no clothes*, Oakland, CA: Berrett-Koehler.
- Sakulku, J. & Alexander, J. (2011). The imposter phenomenon. *International Journal of Behavioral Science*, 6(1), 73-92.
- 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*, 14(2), 218-232.
- Sigurdson, R., The Imposter Syndrome, *The Dean's Blog*, University of Manitoba, January 30, 2008. Retrieved April 10, 2008, http://www.umanitoba.ca/faculties/arts/dean/deanns_blog_30jan2008.html
- Sonnak, C., & Towell, T. (2001). The impostor phenomenon in British university students: Relationships between self-esteem, mental health, parental rearing style and socioeconomic status. *Personality and Individual Differences*, 31(6), 863-874.
- Steinberg, J.A. (1986). Clinical interventions with women experiencing the impostor phenomenon. *Women and Therapy*, 5, 19-26.
- Sutliff, L. S. (1998). Imposter phenomenon and queen bee syndrome: Threats to success. *The Nurse Practitioner*, 23(12), 68-69.
- Thompson, T., Davis, H., & Davidson, J. (1998). Attributional and affective responses of imposters to academic success and failure outcomes. *Personality and Individual Differences*, 25(2), 381-396.
- Thompson, T., Foreman, P., & Martin, F. (2000). Impostor fears and perfectionistic concern over mistakes. *Personality and Individual Differences*, 29, 629-647.
- Topping, M. E. H. (1983). The imposter phenomenon: A study of its construct and incidence in university faculty members. *Dissertation Abstracts International*, 44, 1948B-1949B.
- Vance, S. K. (2002). Incidence of the imposter phenomenon among nurse practitioner students, Unpublished Dissertation, accessed ProQuest.
- Vergauwe, J., Wille, B., Feys, M., DeFruyt, F., & Anseel, F. (2014). Fear of being exposed: The trait-relatedness of the Impostor Phenomenon and its relevance in the work context. *Journal of Business Psychology*, DOI 10.1007/s10869-014-9382-5, Accessed August 28, 2015.
- Want, J., & Kleitman, S. (2006). Imposter phenomenon and self-handicapping: Links with parenting styles and self-confidence. *Personality and Individual Differences*, 40(5), 961-971.
- Webb, J. (2013). My Impostor Syndrome. *Chronicle Of Higher Education*, 60(15), 72.
- Woodson, C. F. (2013). The effects of consumerism on access to higher education. *The Vermont Connection*, 34, 109-117.
- Young, V. (2011). *The secret thoughts of successful women*, New York, NY: Random House.
- Zorn, D. (2005, August). Academic culture feeds the imposter phenomenon. *Academic Leader*, 21, p.1, 8.