Abstract:

Research self-efficacy, imposter phenomenon, and scholarly productivity were explored among a sample of 247 counselor educators. In most cases, feeling like an imposter hindered scholarly productivity; however, the interaction of a moderate to frequent amount of imposter feelings with high research self-efficacy increased scholarly productivity.

Keywords: imposter phenomenon | research self-efficacy | scholarly productivity | counselor educators | achievement goal theory

Article:

Within academia, there is a continued push to publish (Eagan & Garvey 2015), and the number and quality of scholarly products are heavily weighted factors in promotion and tenure decisions, salary merit increases, and the recognition individuals receive within their disciplines (Leslie, 2002). Achievement goal theory (Dweck, 1986; Kumar & Jagacinski, 2006) suggests that individuals will approach goals (such as scholarly productivity) differently depending on their perceived competence and fear of failure. According to achievement goal theory, the confidence that one has in one's ability related to a specific task/goal affects the behaviors one engages in to reach the goal. In the case of scholarly productivity, research self-efficacy is directly and positively related to scholarly productivity among counselor educators (Wester, Borders, et al., 2019). However, as suggested in achievement goal theory (Dweck, 1986) and
empirically supported by Kumar and Jagacinski (2006), fear of failure also underlies whether a person engages in or avoids the goal activity.

Imposter phenomenon (IP), first introduced by Clance and Imes (1978), refers to persistently discrediting evidence of one's competence, doubting one's own abilities, and fearing others will discover that one is a fraud. Thus, IP results in a constant critical internal dialogue and ongoing fear of being “found out.” Individuals with higher levels of IP also tend to underestimate their own abilities (Parkman, 2016). IP can have a positive impact (e.g., motivated to work hard); however, the negative impacts are greater, including increased anxiety and depression, decreased job satisfaction, emotional exhaustion, avoidant behaviors, and burnout (Hutchins & Rainbolt, 2017; Lane, 2015). IP can lead to an “ability-avoid” approach to goals within achievement goal theory, in which the fear of failure (or sense of being an imposter) affects one's overall confidence; thus, the individual avoids even approaching the goal (i.e., scholarly productivity). In the case of academia and scholarly productivity, an example would be a faculty member who avoids engaging in research behaviors or producing scholarly works because of a fear that others will discover their lack of competence in that area.

Imposter feelings seem to decrease over time. Faculty members who are further along in their career are less likely to identify feelings related to IP, whereas faculty members still on the tenure track and non-tenure-track faculty members report having more frequent or intense imposter feelings (Hutchins, 2015). Fitzgerald (2018) suggested this is because newer faculty have fewer experiences on which to base their self-confidence. However, IP feelings paired with lack of confidence can be detrimental to faculty members who need to produce scholarly work to maintain their current academic position. A lack of confidence can result in avoidance and thus prevent them from making an effort to produce new scholarship (Fitzgerald, 2018). The feelings of being an imposter can immobilize faculty who fear being critiqued by others (e.g., editors, peers, reviewers; Hutchins & Rainbolt, 2017). IP also differs across individual identities, such as biological sex or gender, and racial and ethnic identities. Women typically have higher levels of IP compared with men, although mixed results have more recently been found across men and women (Parkman, 2016). Additionally, reports of IP have differed across racial and ethnic identities due to identity development and/or other contextual experiences (Cokley et al., 2013).

Although research self-efficacy has a strong relationship with scholarly productivity (Wester, Borders, et al., 2019), less is known about how feeling like an imposter can influence both research self-efficacy and scholarly productivity among counselor educators. There are many negative outcomes related to IP; however, work-related outcomes, such as scholarly productivity, have not yet been explored (Hutchins et al., 2018). Therefore, the purpose of this research study was to answer the following research questions:

*Research Question 1*: What is the prevalence of IP among counselor educators?

*Research Question 2*: Does IP differ by race/ethnicity, gender, and position as counselor educator?

*Research Question 3*: Do IP and research self-efficacy explain counselor educator scholarly productivity?
Research Question 4: Does IP moderate the relationship between research self-efficacy and scholarly productivity?

Method

Participants

This study was a correlational, cross-sectional study of faculty in counselor education programs accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), with the final sample consisting of 247 counselor educators. Of the sample, 86 individuals (34.8%) did not identify either their gender or race/ethnicity, leaving 161 individuals (65.2%) who reported their gender and race/ethnicity. The majority of participants identified as female (n = 110, 44.5%), with 48 (19.4%) identifying as male, one (0.4%) as transgender, and two (0.8%) as gender queer/gender nonconforming. Of participants who reported race/ethnicity, most identified as White (n = 125, 50.6%), followed by African American/Black (n = 9, 3.6%), Hispanic/Latinx (n = 6, 2.4%), Asian/Pacific Islander (n = 8, 3.2%), multiracial (n = 12, 4.9%), and other (n = 1, 0.4%). The majority of respondents were tenured/tenure track (n = 195, 78.9%). Of those, 104 (42.1%) were tenure-track assistant professors, 44 (17.8%) were tenured/tenure-track associate professors, and 47 (19.0%) were tenured professors. The remaining respondents (n = 51, 20.6%) were not in tenure-track positions, which included non-tenure-track or clinical/teaching faculty (n = 38, 15.4%), adjunct instructors (n = 2, 0.8%), lecturers (n = 3, 1.2%), and “other” (n = 8, 3.2%; e.g., administrative roles such as department chair). One person (0.04%) did not provide a faculty role. Respondents identified the Carnegie classification of their institution as doctoral granting (n = 153, 61.9%), a master's level (n = 74, 30%), and baccalaureate (n = 2, 0.8%). Sixteen respondents (6.5%) stated they were unsure of their institution's Carnegie classification, and two (0.8%) did not report or indicate a Carnegie classification. Faculty had an average of 10.29 years (SD = 8.22) of experience and had been in their current position for an average of 5.74 years (SD = 6.22). (Percentages in this section may not total 100 because of rounding.)

Measures

Research self-efficacy. Research self-efficacy was measured using the Faculty Research Self-Efficacy Scale (FaRSES; Wester, Gonzales, et al., 2019), a 21-item scale that measures the ability to complete research tasks. The scale uses a 5-point Likert scale (from 1 = disagree to 5 = agree), with higher scores indicating greater research self-efficacy. The FaRSES has good psychometrics (Wester, Gonzales, et al., 2019), and the Cronbach's alpha of responses to items on the scale for the current sample was high (α = .92.).

IP. IP was assessed with the Clance Imposter Phenomenon Scale (CIPS; Chrisman et al., 1995), which includes 20 items rated on a 5-point Likert-type scale (from 1 = not at all true to 5 = very true) that measures the presence and experience of IP. CIPS can be used as a full-scale score, and participants can be characterized as having low (scores of 40 or less), moderate (scores between 41 and 60), frequent (scores between 61 and 80), or intense (scores of 81 or more) IP feelings based on the total sum score of the questionnaire (Clance, 1985). CIPS has evidence of strong
psychometrics (Chrisman et al., 1995), and the Cronbach's alpha for the current sample was high ($\alpha = .93$).

**Scholarly productivity.** We assessed scholarly productivity by summing counts for four items self-reported by participants: the number of published manuscripts, manuscripts submitted for review, book chapters, and books written.

**Procedure**

To create a sampling frame, we compiled a list of 434 master's- and doctoral-level CACREP-accredited programs. Names and email addresses of faculty were retrieved from departmental websites. Forty-six programs were removed from the sampling frame because no contact information was available on the websites. This left 388 programs, resulting in a total of 2,920 names and emails for the final sampling frame.

After receiving institutional review board approval, we contacted each of the 2,920 faculty members and asked them to complete a 15-minute online survey with the aforementioned measures. Twenty-seven individuals indicated they were not appropriate for the study (i.e., not counselor educator or not working as a faculty member), and 38 emails bounced back indicating invalid email address, thus decreasing the potential sample to 2,855 counselor educators. Of these, a total of 337 faculty responded to the survey (11.8% response rate). Of those who responded, 90 were removed because of large amounts of missing data, resulting in a final sample of 247 counselor educators (8.7% response rate with complete data).

**Data Analysis**

We used descriptive statistics to explore the prevalence of IP among counselor educators and analyses of variance (ANOVAs) to examine IP across race/ethnicity, gender, and faculty position. Given that scholarly productivity was a count variable, and count variables do not typically follow a linear distribution, we used a Poisson regression to examine the relationships between IP, research self-efficacy, and scholarly productivity, as well as the moderation between research self-efficacy and IP in relation to scholarly productivity, while controlling for gender and years of experience as a counselor educator. Poisson regression is typical for a count variable that is not linearly distributed (Gardner et al., 1995).

We conducted a preliminary analysis to examine differences in scholarly productivity and research self-efficacy based on gender and race/ethnicity. For gender, three groups were compared in relation to scholarly productivity (outcome variable) and research self-efficacy: male ($n = 48$), female ($n = 110$), and those whose gender was not identified ($n = 86$). Transgender and gender-nonconforming individuals were not included in the analysis given the small sample size in each group. Given the large number of counselor educators who did not identify their gender, and the potential that this was intended to maintain anonymity in responding, they were included as a group. Statistically significant differences across gender groups were found for scholarly productivity, $F(2, 234) = 7.33, p < .01$, and research self-efficacy, $F(2, 235) = 6.07, p < .01$. Post hoc Scheffé tests determined that the only difference in scholarly productivity was between male participants ($M = 29.63, SD = 27.99$) and gender-not-
identified participants ($M = 13.40, SD = 22.07$). No statistical differences existed between these two groups and female participants ($M = 20.69, SD = 21.50$) on scholarly productivity. Counselor educators who did not report their gender also reported significantly lower levels of research self-efficacy ($M = 93.59, SD = 14.13$) compared with male- and female-identified counselor educators ($M = 101.21, SD = 14.13$ and $M = 100.04, SD = 13.54$, respectively), with no statistical differences between male and female participants on research self-efficacy. Race and ethnicity were explored similarly in preliminary analyses, with no differences found for scholarly productivity and research self-efficacy, $F(6, 231) = 1.95, p > .05$ and $F(6, 238) = 3.08, p > .05$, respectively.

**Results**

Counselor educators in this study reported moderate levels of IP, with a mean score of 54.38 ($SD = 13.94$, range = 20–100). Exploring the categories of IP, 37 (15%) counselor educators reported few to no feelings of being an imposter, 133 (53.8%) reported moderate experiences of IP feelings, 61 (25.5%) reported frequent IP feelings, and 14 (5.7%) reported intense IP feelings. IP did not differ across gender, $F(2, 243) = 1.04, p > .05$, or race/ethnicity, $F(5, 245) = 0.68, p > .05$. IP did differ across faculty rank/role, $F(3, 244) = 7.22, p < .001$. Post hoc tests revealed that tenure-track assistant professors ($M = 58.56, SD = 15.07$) differed significantly on IP feelings compared with tenured full professors ($M = 48.06, SD = 10.54$), with no other statistical differences existing between faculty roles (for tenured associate professors, $M = 52.18, SD = 12.91$; for non-tenure-track faculty, $M = 53.62, SD = 12.82$).

![Figure 1](image)

**FIGURE 1.** Interaction of Research Self-Efficacy (RSE) and Imposter Phenomenon in Relation to Scholarly Productivity

We used a Poisson regression to explore the direct and moderating relationships between research self-efficacy, IP, and scholarly productivity while controlling for gender and years of experience as a faculty (the greater the number of years of experience, the greater the scholarly productivity; $r = .51, p < .001$). In the Poisson regression, the likelihood ratio chi-square test
indicated the model was a significant improvement in fit over the null model ($\chi^2 = 4,351.40, p < .001$), with all four main variables significantly predicting scholarly productivity (gender, $\chi^2 = 4.24, p < .05$; years as faculty, $\chi^2 = 38.96, p < .001$; research self-efficacy, $\chi^2 = 521.74, p < .001$; and IP, $\chi^2 = 180.57, p < .001$), as well as the interaction between research self-efficacy and IP predicting scholarly productivity ($\chi^2 = 626.73, p < .001$). The interaction (see Figure 1) revealed that a moderate to frequent level of IP seemed to increase scholarly productivity when research self-efficacy was high; however, the more intense IP experiences were, the lower the research productivity, regardless of research self-efficacy. When research self-efficacy was lower among counselor educators, scholarly productivity continually decreased as IP feelings increased.

Discussion

One of the primary findings in this study was how IP and research self-efficacy related to scholarly productivity. Particularly notable was that individuals with high research self-efficacy and moderate to frequent levels of IP were the most productive scholars. This finding aligns with that of Lane (2015), who suggested that IP can motivate individuals to work harder or produce more. Thus, with a foundation of high research self-efficacy, a moderate amount of IP may be beneficial to increasing scholarly productivity and helping counselor educators engage in research-focused activities. This matches the ability-approach idea within achievement goal theory, wherein individuals who have a fear of being discovered as a fraud but have higher levels of confidence in their ability are more likely to engage in the goal activity than those with low levels of confidence (Dweck, 1986; Kumar & Jagacinski, 2006). However, it should be noted that although a moderate to frequent level of IP appears to interact with high research self-efficacy in a positive way, it is unclear how support systems, mentors, or departmental contexts for this group of counselor educators may have also helped to support their research activities. Additionally, although high research self-efficacy and moderate/frequent IP appear to be a productive match in relation to research, level of scholarly productivity declined as IP feelings became more intense regardless of research self-efficacy. This decline indicates that feelings of IP are more debilitating as they increase, even with high levels of research self-efficacy.

Although intense feelings of IP are detrimental to scholarly productivity regardless of levels of research self-efficacy, in our study, counselor educators who had low levels of research self-efficacy had a different experience of IP altogether. Ultimately, for faculty with lower research self-efficacy, any IP feelings resulted in decreased scholarly productivity. Thus, IP interacted with the low level of belief in one's research abilities, which then appeared to hinder productivity. This finding supports the ability-avoid approach described in achievement goal theory (Dweck, 1986; Kumar & Jagacinski, 2006), wherein faculty potentially avoid engaging in research activities or their performance deteriorates in relation to research productivity, especially when confidence in their ability is low. Thus, on the basis of these findings, it is important to engage in trainings or activities that will help to increase counselor educator research self-efficacy.

What is unclear in this study is where in the process the avoidance or IP is occurring for counselor educators. Kuhlthau (2004) suggested that the start of a research project is when faculty need the most mentorship and guidance to build confidence, and Fitzgerald (2018) added that the beginning of one's research career (typically graduate students or pretenured faculty)
gives rise to uncertainty in oneself because of a lack of a clear scholarly identity. Furthermore, Fitzgerald suggested that IP is more likely to exist earlier in one's career because of fewer experiences on which to base one's confidence. This may be true in the current sample, given that tenure-track assistant professors felt a greater sense of IP than did full professors; however, no other differences existed among faculty rank. For faculty who experience IP and low self-efficacy, it would be helpful to have a better idea where in the research process or within one's career one should have collaboration, additional training, or mentorship to assist in removing debilitation or avoidance behaviors in relation to research.

Whereas some researchers have suggested that the beginning of the career is the most daunting and influential in creating IP feelings, others have suggested that the academic culture can create these feelings, specifically related to research (Hutchins & Rainbolt, 2017). In Hutchins and Rainbolt's (2017) study, four themes emerged as triggers to IP: colleagues questioning one's expertise, the pressure to produce research, comparison with other colleagues, and inability to internalize because of continual feeling of being an imposter. Thus, with faculty facing increasing pressure to “publish or perish” within the culture of academia (Moosa, 2018), it seems imperative to determine where in the process of research IP is most impactful, as well as where counselor educators feel most efficacious. It is also important to understand what factors of the training environment (Wester, Borders, et al., 2019) and the employment environment help minimize, as opposed to enhance, research self-efficacy or feelings of being an imposter. Unearthing these factors and understanding their impact on the research process, and ultimately on scholarly productivity, is important given the increasing demands for scholarly productivity within academia.

The interaction between research self-efficacy and IP is particularly salient for the field of counselor education, which has had multiple calls to increase both the quantity and the quality of research produced (see Fong & Malone, 1994; Wester et al., 2013) as well as the quality of research training (e.g., Milsom & Moran, 2015; Okech et al., 2006). Counselor education programs might want to focus on helping both counselor educators and doctoral students feel efficacious around their research. Additionally, having conversations about IP could help validate and normalize the productive, healthier side of IP while reducing debilitating effects, such as isolation and paralysis, that could be caused by higher or more intense feelings of IP.

**Limitations and Future Studies**

Limitations to the current study need to be acknowledged. First, although 247 counselor educators were included in this study, which was enough for statistical power, the response rate was low. Therefore, the generalizability of the results is limited. Additionally, half of the respondents were White and self-identified as male or female, which can limit the implications of the findings for minoritized faculty. Twenty percent of participants reported not being in a tenure-track position. Although non-tenure-track faculty (e.g., clinical, teaching, adjunct) are not always evaluated on scholarly productivity, it does not mean that they do not want to engage in research or that their university does not require it. Some universities and colleges have moved away from hiring faculty in tenure-track lines (Flaherty, 2018); thus, it is important for departments and university to focus on both tenure-track and non-tenure-track faculty when it comes to research. Finally, one third of our respondents did not provide demographics. This
could have occurred for many reasons, including that, because the demographic survey was at the end of the online survey, participants may have been burned out and skipped completing that survey page. Alternatively, because the topics being investigated are sensitive in nature—asking about individuals' confidence in their research abilities and their imposter feelings—individuals may have been reluctant to provide identifying demographic information. Given the marginalization of underrepresented populations in higher education, it is important to conduct additional research to explore the interaction of various identities and how these identities play a role in self-efficacy and IP (Mitchell et al., 2019). Conducting longitudinal studies that explore how IP and research self-efficacy change throughout training and within counselor educators' careers may be important to discerning the interaction and the factors that influence both. Finally, more depth of understanding is needed as to where IP truly emerges and what would be most helpful in combating feelings of being a fraud, especially in combination with low self-efficacy. Thus, more qualitative designs are needed to explore this area for counselor educators.

**Conclusion**

IP can have a debilitating effect on counselor educators' scholarly productivity. Although a modest amount of IP can have a positive effect on the quantity of scholarly work for some individuals, it appears to hinder scholarship more than it helps. Creating a strong foundation of research self-efficacy during one's training program (and beyond) can buffer against moderate feelings of IP. Additionally, finding ways to provide support or mentorship to faculty who are beginning their research careers is important. Therefore, a greater understanding of how far-reaching IP is within the research process and across faculty roles is needed.

**References**


