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The Impact of the Impostor Phenomenon on Mental Health Outcomes of Undergraduate Students

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Abstract

The Impact of the Impostor Phenomenon on Mental Health Outcomes of Undergraduate Students

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This paper provides an overview of the impostor phenomenon as it pertains to the mental health outcomes of college undergraduate students. This overview is framed within a larger concern for factors negatively impacting college retention. This paper reviews the origin and descriptions of the impostor phenomenon, differences based on demographic variables as well as the impostor phenomenon's connection to career planning, mental health such as anxiety and depression, and maladaptive perfectionism. Suggestions for interventions based on the benefits of cognitive behavioral therapy in treating perfectionism as well as discussions of the potential value of self-compassion skill-building will be presented. Recommendations for future research include special attention to how impostorism is conceptualized within ethnic/racial minority communities and the value of training career counselors to recognize signs of impostorism.

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Chapter 1: Introduction

In 2018, the projected number of students set to enroll in American college and universities was 19 million, almost 5 million more than the amount that enrolled in 2000 (NCES, n.d.). However, college acceptance is only the first step towards obtaining a degree, as the national completion rate for those who entered four and two-year institutions in 2012 was only 58.3% (NSC Research Center, 2018). This number can vary depending on the type of university, with some 4-year institutions touting a completion rate for bachelor's degree within six years as low as 32% (NCES, n.d.). As a result of these disappointing numbers, undergraduate retention has become highly studied as educators strive to understand the factors impacting their students and keeping them from completing their degrees. Research into retention has examined variables ranging from high school grade point average, social support, and observing racism (Robbins et al., 2004; Johnson et al., 2014) to student loans and faculty support (Goldrick-Rab et al., 2016; Xu, 2018). Another facet that continues to garner special attention is the role of student mental health.

The move from high school to college is a difficult one, and the transition can be especially worrisome for those predisposed to mental health concerns such as depression and anxiety. Academic worries such as exam grades and class workload present new stressors and adjusting to academic rigor has been found to influence depressive symptoms within a college sample (Abouserie, 1994; Acharya, Jin, & Collins, 2018). Finding one's place within university social and academic spheres can impact self-esteem, which may also lead to depressive symptomology (Dixon & Kurpius, 2008). A 2019 study of college undergraduates found that students who were especially sensitive to how they were perceived by others were more likely to

experience loneliness along with anxiety symptoms (Moeller & Seehuus). While the onset of mental concerns is the result of many factors, there is no denying that the college experience often plays a unique role in the facilitation of new symptomology (Furr, Westefeld, McConnell, & Jenkins, 2001).

Students who must cope with mental illness on top of their academic responsibilities are at special risk for leaving school before completing their degree. One study found that students who attended more counseling sessions due to more severe mental health concerns were less likely to graduate than those who did not attend any sessions (Scofield et al., 2017). Reports from 500 university and college counseling centers noted that while university enrollment in a 5-year span had increased by 5%, the usage of counseling centers during the same span increased 30-40% on average (CCMH, 2017). While frequency rates of student concerns such as family and academic performance have remained the same, reports of anxiety and depression continue to grow and remain the most common issues students present within recent years (CCMH, 2017). Students who endure depression and anxiety symptoms face critical interference with their ability to stay motivated in schoolwork and engage with others socially (Boutin & Accordino, 2011; Salzer 2012). Taking part in extracurricular activities as well as engaging with faculty and other students are important predictors of graduating (Salzer, 2012; Koch, Mamiseisvili & Higgins, 2014), so for students contending with hopelessness, excessive worrying, or who are simply unable to get out of bed, missing these opportunities is especially harmful.

Mental health can also impact career development, as hopelessness and feelings of depression can limit a student's ability to properly plan ahead or make decisions to foster career thinking (Dieringer et al., 2016). A study of dysfunctional career thinking, depression, and anxiety found that the three factors were heavily associated and that dysfunctional career

thinking was found to be a strong predictor of career indecision. Dysfunctional career thinking included thoughts such as “I’m so confused, I’ll never be able to choose a field of study or occupation” (Saunders, et al., 2000, p.291). The authors noted that anxiety and depression likely exacerbate career issues for students by hindering their ability to process information, thereby leading the student to become passive and give up (Beck, 1987; Saunders et al., 2000). This poses a danger to struggling students, as having a job-related or a career goal is related to positive persistence intentions (Hull-Blanks, et al., 2005). These students may also be less likely to take part in career courses, which have also been linked to higher retention rates (Carver & Smart, 1985; Reardon et al., 2015).

With more students reporting anxiety and depression symptoms, it is vital that college administrators, counselors, and researchers continue to investigate and grow their understanding of potential influences that may lead to increased symptomology. This report aims to facilitate further discussion in the role of the impostor phenomenon in impacting the mental health of undergraduate students. The impostor phenomenon speaks to feelings of fraudulence experienced by high achievers (Clance & Imes, 1978) that leads them to discount their successes. Due to the increased pressure and competition inherent to the transition from high school to college, understanding the impact of impostor feelings serves as a valuable tool for those hoping to find ways to increase college retention.

The current paper provides a review of how the impostor phenomenon has been conceptualized and studied, particularly within samples of undergraduate students. Students who experience depression, anxiety, and other negative mental health outcomes experience significant barriers to success in college (Boutin & Accordino, 2011; Salzer 2012). It is important for counselors at college counseling and career counseling centers to be familiar with the impostor

phenomenon in order to reduce the negative consequences associated with feeling like a fraud.

This paper will serve as an introduction to understanding impostorism through discussion of the origins of this construct, its relation to maladaptive perfection and other mental health outcomes, as well as a review of how it has been studied across college populations. Then a review of best practices for mental health practitioners and career counselors seeking to help those with impostor feelings will follow.

Chapter 2: Literature Review

LABELLING IMPOSTOR FEELINGS

The impostor phenomenon was first described in the writings of psychologists Clance and Imes after speaking to many high-achieving individuals, particularly women, who doubted their abilities and successes (Clance, 2013; Clance & Imes, 1978). Over 150 women reported feeling phony throughout a variety of domains and fields of study, with the individuals ranging in experience from undergraduate students to lawyers. The common feelings amongst those so-called impostors was the notion that all their successes must not be related to their actual ability. Instead, their progress was simply a matter of sheer luck or having fooled others into thinking they were more competent than they truly were (Clance & Imes, 1978). By discounting their abilities, these women were unable to internalize their success, leading to a sense of self-doubt that they would one day be discovered as fraudulent. Clance et al. (1995) summarized accounts of women who upon successfully finishing a project, would either tell herself others do not have to work as hard she does for the same result or that she simply tricked others with a subpar product. Every subsequent project creates another opportunity for a so-called impostor to be exposed, creating a sense of dread and self-doubt no matter the amount of praise received (Clance et al., 1995).

Clance (1985) broke down the impostor phenomenon into six potential characteristics that together formed the “imposter profile”: the impostor cycle, the need to be the very best, superwoman/superman aspects, fear of failure, denial of competence/discounting praise, and the fear of success. In her clinical work, Clance found that most impostors embodied two or three of these characteristics. The first and most critical of these traits is the impostor cycle, which

describes how individuals experience anxiety upon receiving an assignment. Worried about living up to expectations, the impostor over-prepares and despite success, is only able to focus on how difficult the task was for them (Clance, 1985). The impostor convinces themselves that the panic and being overly prepared is the only way for them to succeed. The need to be the very best is a trait endured by top performers who, upon entering new territories such as college and beyond, experience discomfort when confronted with other successful individuals. This discomfort leads them to disavow their own intelligence (Clance, 1985). Superwoman/superman is closely tied to the need to be the very best and speaks to perfectionistic standards, as the individual wants to accomplish tasks with minimal effort. When this is not possible, the impostor feels they have failed, leading them to overwork in future endeavors so as to avoid the shame and humiliation associated with disappointment. Denial of competence and discounting praise refers to the inability to internalize positive feedback or accept one's own accomplishments or intelligence. Some impostors, however, fear success due to the worry of opening themselves up to opportunities for failure by virtue of being trusted with more responsibilities (Clance, 1985).

Originally, Clance and Imes claimed (1978) that the impostor phenomenon is experienced more often in women than men, but this statement has received mixed results empirically (Topping & Kimmel, 1985; Fried-Buchalter, 1997). Cokley and colleagues (2013) posited that their lack of findings relating to gender difference in an ethnic minority sample suggests that for those students, gender may not impact the experience of impostorism. Other work by Cokley and colleagues (2018) that included White/European American students did find that women reported significantly higher impostor feelings, highlighting the continued confusion regarding the role of gender. Other research found that gender stigma consciousness was a

positive predictor of impostorism for women and men, though the relationship was stronger for women. The researchers suggested that individuals who worry that others may use stereotypes to evaluate their abilities may be prone to impostor feelings (Cokley et al., 2013). Presently, more research looking at factors such as gender socialization is needed in order to make sense of these conflicting findings.

MENTAL HEALTH EXPERIENCES OF IMPOSTORS

There is a strong link between the impostor phenomenon and poor mental health outcomes (Sonnak & Towel, 2001; Sakulku & Alexander, 2011). Chrisman and colleagues (1995) found that impostor fears were correlated with depression. The authors noted that the strongest of these correlations was with the Depressive Experiences Questionnaire (DEQ; Kolligan & Sternberg, 1991), which asks about depressive thoughts and self-criticism. The same study found that impostor feelings were negatively correlated with measures of self-esteem (Chrisman et. al., 1995). A study of how impostors versus non-impostors reacted to failure and success found that impostors reported higher levels of anxiety regardless of the type of feedback they received about their work. It also found that compared to non-impostors, impostors had significantly lower academic self-esteem and lower global self-esteem (Thompson, Davis, & Davidson, 1997). A study of how impostors versus non-impostors respond to mistakes found that overall, impostors reported significantly more negative mood compared to non-impostors regardless of whether they were in the low or high mistakes condition. Impostors also reported greater anxiety before and after completing the task (Thompson, Foreman, & Martin, 2000). Topping and Kimmel (1985) discussed a link between impostorism and trait anxiety, noting that impostor feelings may go hand-in-hand with generalized anxiety disorder, supporting Clance and Imes' clinical observations (1978).

A growing body of research encompasses the role of the impostor phenomenon in the lives of racial and ethnic student mental health. In a study of ethnic minority college students, impostor feelings more strongly predicted mental health outcomes than measures of minority status stress. Cokley and colleagues (2013) found that impostor feelings were negatively related to psychological well-being and positively related to psychological distress for African American, Asian American, and Latino/a students. Another study found that impostor feelings were a stronger predictor of anxiety and depression than was discrimination in a sample of Asian American, African American, and Latino/a American students (Cokley et al., 2017). In both studies, the authors discussed how minority students may be especially vulnerable to feelings of impostorism, a sentiment that echoes earlier work by Clance et al. (1995) that suggested impostor feelings would be incredibly difficult for ethnic minorities, as they endure stereotypes and expectations beyond just the family and gender-expectations experienced by White women. Peteet, Brown, Lige, and Lanaway's (2014) study found that higher impostor feelings predicted higher levels of psychological distress and lower self-esteem in a sample of Black undergraduates. Given the established relationship between impostorism and anxiety and depression, two factors that greatly impact college retention, understanding the impostor phenomenon is of critical importance for colleges and universities and especially important to those working with minority student populations.

CAREER ASPIRATIONS

Along with negative mental health outcomes, feeling like an impostor can also impact one's future career. Research into career development of undergraduate students and working adults found that higher scores on CIPS was related to lower scores on both measures of career planning and measures regarding motivation to take on leadership roles (Neureiter & Traut-Mattausch, 2016; 2017). Neureiter and Traut-Mattausch (2017) conceptualized impostorism as a

maladaptivity resource, as it hinders all factors that can help an individual make career decisions. The authors noted that because the impostor phenomenon leads one to doubt their abilities, it follows that these individuals would struggle to visualize their future career. Fear of success served as a stronger predictor for the working sample than for the undergraduates, suggesting that within the world of work, individuals are concerned about the reaction of their colleagues should they be offered a promotion role (Neureiter & Traut-Mattausch, 2016). Within the undergraduate sample, low self-esteem and fear of failure were stronger predictors of the impostor phenomenon, leading the researchers to highlight these traits as an entry-point for interventions.

In a second study, Neureiter and Trait-Mattausch (2016a) found that impostors had lower job satisfaction and lower career optimism, the second of which has a negative impact on an individual's perception of their own internal marketability. Internal marketability refers to an employee's belief as to whether their employer values them (Eby et al., 2003). The authors suggested that it is this lower internalized marketability that keeps impostors from taking on higher positions, lending support to past research that found impostors feel they have fewer options should they leave their current job (Vergauwe et al., 2015; Neureiter & Trait-Mattausch; 2016a). While the link between career aspirations and college retention has received minimal attention so far, recognizing the role of the impostor phenomenon in career-decision making provides a valuable frame of reference for mental health and career counselors alike in their work with students at risk for dropping out.

ORIGINS OF IMPOSTORISM

Understanding potential origins of impostor feelings provides valuable context for how these negative internalizations eventually impact mental health and career decisions. Based on

their clinical work, Clance and Imes (1978) offered potential family situations that could lead a woman to ultimately experience the impostor phenomenon. One of these scenarios involves a sibling or other relative that is placed on an intellectual pedestal, leaving the woman with a desire to prove herself. However, even if she does succeed, the family undervalues her accomplishments. The second scenario involves a family where the woman herself receives ample praise for her successes growing up, leading her to believe that if one is truly remarkable, then achievements must come with relatively low effort (Clance & Imes, 1978). This praise backfires when she eventually reaches a point in her life where she is unable to succeed without putting in substantial work, leading to feelings of doubt regarding her intelligence. In both scenarios, being unable to meet the internalized expectations set by the family results in the thoughts of fraudulence that define the impostor phenomenon (Clance & Imes, 1978).

Scholars have struggled using empirical research to provide a strong connection between family background and impostorism per the suggestions of Clance and Imes. Early research found a positive correlation between both family conflict and family control with impostor scores (Sakulku & Alexander, 2011). The more substantial of these studies examined the role of parental rearing style in a sample of British university students (Sonnack & Towel, 2001). The authors found that higher level of parental control and less parental care were associated with higher impostor scores. A replication of Sonnack and Towel's (2001) study looked individually at the care of mothers and fathers and found a moderate inverse relationship between impostorism and the care of fathers. The relationship between impostor feels and the care of mothers was not significant (Want & Kleitman, 2006). The link between family achievement orientation and impostor feelings has received even less empirical support (King & Cooley, 1995). In their review of research into the impostor phenomenon, Sakulku and Alexander (2011)

commented that despite best efforts, few studies accurately captured the family dynamics described by Clance and Imes (1978), which limits further discussion of the role of family in the development of impostor feelings.

Other research has examined psychological and personality attributes that may predict the onset of the impostor phenomenon. Impostor feelings have been positively linked to self-handicapping, which captures behaviors such as procrastinating on work until the last possible moment (Cowman & Ferrari, 2002). Cowman and Ferrari noted that being prone to shame also predicted impostor feelings, which the authors noted highlighted how impostors internalize and ruminate on negative reactions as opposed to find ways to assuage themselves. While unable to discuss causality, the McGregory, Gee, and Posey study (2008) found that impostorism is positively related to depression symptoms. They noted that because impostors are incredibly self-critical, they may not realize their thoughts match common symptoms of depression. Impostorism has also been linked to low self-esteem (Chrisman et al., 1995; Sonnak & Towel, 2001). Schubert and Bowker (2019) found that for undergraduate students, low self-esteem and unstable high self-esteem were strongly related to impostor feelings when compared to those with stable high self-esteem. The researchers explained this particular finding by highlighting the role of self-doubt in making these individuals especially susceptible to feeling fraudulent (Schubert & Bowker, 2019). Self-esteem has also been shown to mediate the relationship between maladaptive dimensions of perfectionism and impostor feelings, denoting that those with low self-esteem may be especially prone to experience impostorism as a result of having set unachievable standards for themselves (Cokley et al., 2018).

Neuroticism and conscientiousness have also been assessed as potential predictors of impostor feelings. In a sample of American undergraduate students, neuroticism, referring to

negative affect and worry, was strongly correlated with impostor feelings. Conscientiousness, referring to one's self-control and organization, was found to be negatively correlated (Bernard, 2002; Costa & McCrae, 1992). The author highlighted that the relationship between impostorism and neuroticism predisposes individuals to depression and anxiety. Bernard (2002) also posited that the combination of high neuroticism and low conscientiousness could contribute to self-handicapping, thus echoing the sentiments of research by Cowman and Ferrarri (2002). The overlap between these impostor tendencies and those of perfectionistic standards is also particularly engaging to those interested in understanding more about how the impostor phenomenon operates.

RELATION TO PERFECTIONISM

Impostors and perfectionists manifest similar patterns in how they internalize personal standards of success. Perfectionists are those who set high personal standards and exert maximum effort in order to be the best (Hamachek, 1978). However, it is important to note that the drive to be perfect alone is not inherently a negative attribute. Hamachek theorized that perfectionism could be broken down into two camps: normal and neurotic. Normal perfectionists are those who are able to set lofty goals without causing themselves any distress. Neurotic perfectionists, by comparison, endure incredible emotional consequences when they are unable to meet the unobtainable standards they have set for themselves (Hamachek, 1978). This idea of a mismatch between expectations and reality would later be labelled in measures of perfectionism as discrepancy, and it is discrepancy that identifies what are called maladaptive perfectionists. Adaptive perfectionists are those who set high standards but are not overly critical about how their abilities compare to those standards (Slaney, Rice, Mobley, Trippie, & Ashby, 2001). It is the maladaptive form of perfectionism that has been found to correlate with impostorism (Cokley et al, 2018).

Setting unrealistic standards was a common theme in Clance and Imes original work (1978) describing the impostor phenomenon. Impostors and perfectionists both strive to hide their errors from others in order to present a more ideal self, though impostors are more apt to discuss their flaws as a means to diminish their achievements (Frost et al., 1995). Thompson, Davis, and Davidson (1997) explored the relationship between impostors and perfectionists by examining the reactions of undergraduates after being asked to imagine scenarios where they either performed well or poorly on an exam. Results showed that students who were identified as impostors more often attributed their success to external factors when compared to non-impostor students. The authors noted that the habit of devaluing one's abilities matches onto both descriptions of impostors and perfectionists (Thompson, Davis, & Davidson, 1997). Also similar to descriptions of perfectionists was the finding that upon failure, impostors overgeneralized the negative consequences of underperforming as being indicative of their self-concept. This fear of failure mirrors Hamachek's (1978) descriptions of neurotic perfectionists who are constantly on the defensive as a result of this negative internalizations. Additional work by Thompson, Foreman, and Martin (2000) asked students to complete a measuring of impostorism and the Stroop Color-Word task and then complete items evaluating their own performance. Impostors were found to overestimate the number of mistakes made regardless of whether they had a high or low number of errors. The authors also noted no performance differences between students identified as impostors or non-impostors (Thompson, Foreman, & Martin, 2000). This pattern mimics that of perfectionists in Frost et al.'s study (1990), as perfectionists felt they underperformed regardless of their actual scores.

Impostorism and perfectionism are also noticeably alike in that they are linked to similar negative mental health outcomes. Research has found perfectionism, particularly concern for

mistakes, is correlated with depression and anxiety, and that perfectionism can also facilitate burnout (Frost, 1990; Luo, Wang, Zhang, Chen, & Quan, 2016). Henning, Ey, and Shaw (1998) found that in a sample of health professions students, perfectionistic students faced significantly greater risk of experiencing psychological distress, such that students who worried about meeting expectations reported more psychological symptoms. The authors also found the impostor concerns within students was a stronger predictor of psychological distress than all other factors. Perfectionism and impostor feelings have also been linked with self-handicapping, which can negatively impact self-worth (Ferrari & Thompson, 2006). For those working with impostors, understanding the parallels between impostorism and maladaptive perfectionism is useful for case conceptualization and treatment decisions.

Chapter 3: Application to Practice

IMPLICATIONS FOR PRACTICE

Rising awareness of the impostor phenomenon has led to increased efforts to educate others on the nature of impostor feelings in undergraduate populations in the hopes of reducing negative outcomes (Felder, 1988; Parkman, 2016). In their 1978 work, Clance and Imes provided a number of suggestions for therapists working with individuals experiencing the impostor phenomenon based on their own clinical observations. The authors cautioned that their clients rarely came to therapy with the purpose of discussing impostorism, as those feelings are typically closely guarded. Clance and Imes advocated for the use of group therapy in working with impostors, especially if the group contains other high-achieving individuals (1978). The authors explained that the group setting allows an impostor to reflect on their own misguided beliefs by seeing other accomplished members of the group struggle with similar experiences, thus providing a sense of clarity. Clance and Imes went on to detail how homework assignments can help reduce impostor feelings, for example by having the impostor track positive feedback received and resist the urge to negate the feedback (1978). While valuable, there has been little empirical work testing these interventions specifically with impostors.

Given the strong link between impostorism and maladaptive perfectionism, looking into interventions for perfectionisms provides inspiration for how therapists may conceptualize and respond to fraudulent thinking. Early work by Clance (1985) provided suggestions for dealing with perfectionism as an inherent piece of dealing with impostorism. Research has endeavored to test the role of cognitive behavioral therapies in reducing the negative outcomes of perfectionism. Work by Kutlesa and Arthur (2008) utilized a treatment that met twice a week for four weeks, where participants discussed various themes of perfectionism and took part in skill

training to learn to feel satisfied with work and to set realistic goals. The authors found that pretest to posttest scores showed a significant decrease in depression, anxiety, and perfectionism (Kutlesa, & Arthur, 2008). An 8-week CBT group intervention found significant reductions in perfectionism, self-criticism, depression, and anxiety that were maintained at the 3-month follow-up (Steele et al., 2013). A meta-analysis of perfectionism interventions found that cognitive-behavioral approaches in a short-term format was found to reduce symptoms of perfectionism as well as reduce symptoms of anxiety and depression (Lloyd, Schmidt, Khondoker, & Tchanturia, 2015). The interventions included touched on aspects of perfectionism such as self-criticism, selective attention, and performance monitoring among others. As many of these detrimental behaviors are also present for those with impostor feelings, there is a lot of promise for the utilization of cognitive behavioral approaches for those eager to combat the impostor phenomenon (Wang, Sheveleva, & Peryakova, 2019). Techniques suggested by Clance (1985) such as engaging with a client's perceptions of a worst case scenario for not being perfect or tracking doubts about one's success would easily transition to similarly structured interventions to those discussed.

There also exists preliminary evidence as to the value of utilizing self-compassion as a means to reducing impostor feelings. Self-compassion refers to how an individual relates to themselves, and emphasizes positive self-talk and deemphasizes over-identification with negative aspects of oneself (Fletcher et al., 2019). Self-compassion has been shown to partially mediate the relationship between maladaptive perfectionism and depression in adults (Mehr & Adams, 2016) and has been found to be useful for individuals suffering from mental health concerns such as increased self-criticism that are related to mood disorders (Leaviss & Uttley, 2015). A study of Austrian undergraduates found that impostorism was negatively associated

with self-compassion (Patzak, Kollmayer, & Schover, 2017). The authors noted that self-compassion may be especially useful as skill-based interventions focused around self-compassion may be more approachable for students who are otherwise dedicated to hiding their perceived fraudulence. Given that impostors may be resistant to discuss their fears as a result of not wanting to be outed as a fraud, self-compassion skill-building in individual therapy may be a more easily accepted first step for clients who may be adverse to group settings.

FUTURE DIRECTIONS

While the basic personality profile and negative mental health outcomes associated with the impostor phenomenon are readily documented within White samples (Clance & Imes, 1978, Sakulu & Alexander, 2011), there is still much to be done in order to truly understand how to reduce impostor feelings. More research is needed in order to breakdown how the impostor experience differs for racial and ethnic minority undergraduates. Research by Cokley et al., (2013) found that Asian American students experienced significantly higher impostorism than did Latino/a American and African American students, which conflicted with expectations that students who endured more negative stereotypes regarding intelligence would therefore have high impostorism scores. The authors connected this finding to past research documenting perfectionistic habits of Asian American students, likely due to the pressure put on them by the model-minority stereotype (Yoon & Lau, 2008; Cokley et al., 2013).

For students who are underrepresented at predominately White institutions, recognizing how cultural expectations and values might interact with impostor feelings may well lead to insight in how to specifically work with these students. Cokley et al. (2017) noted that due to past research that found minority students attended fewer sessions than White students (Kearney et al., 2005), counselors who assessed factors such as impostorism and racialized experiences

such as discrimination would benefit minority students overall. They suggested that plainly asking racial/ethnic minority students about impostor feelings may help reduce the stigma around accessing mental services, which would lead to students attending more sessions (Ibaraki & Hall, 2014). To this end, future research into useful interventions for the impostor phenomenon would benefit from taking a multicultural lens in order to incorporate past research into how to make racial and ethnic minority students more comfortable in the therapy space. More pointed research into these types of interventions would help mental health practitioners identify best practices for engaging with impostors and specifically with impostors who are also people of color.

Much of the work that has examined the impostor phenomenon in the lives of racial and ethnic minorities has focused on the experiences of Black and African American college students. One such study by Peteet, Brown, Lige, and Lanaway (2014) found that for Black and African American students from numerous universities, higher impostor feelings predicted higher psychological distress and lower self-esteem. The authors noted that while similar patterns had been documented in research with primarily White samples, there was a lack of research confirming that the impostor phenomenon operated similarly for racial and ethnic minorities. Research at a historically Black university found that the relationship between survivor guilt and depressive symptomology was mediated by impostorism (Cammie, Clark, Ross, & Taylor, 2009). Past research using diverse samples has questioned the applicability of measures of impostorism (Harvey, 1983; Ewing, et al., 1996) and the generalizability of findings that do not endeavor to conduct independent analyses for various racial and ethnic minority groups (Peteet, Montgomery, & Weekes, 2015). While the existing research is valuable, there is still a lot left to uncover.

College career counsellors present another potential ally for students with impostor feelings. Undergraduates are visiting career services in higher numbers than past years, with Gallup-Purdue reporting that 61% of students who earned degrees between 2010-2016 visited career services. Of the students who utilize career services, the majority of them are students of color, highlighting how career counselors can engage with student populations who are known to attend fewer mental health counseling sessions (Kearney et al., 2005; Gallup-Purdue, 2016). By being able to recognize the signs of low career engagement that have been linked with impostor feelings (Neureiter & Traut-Mattausch, 2016; 2017), career counselors are in a unique position to engage with students who may avoid traditional mental health counseling or who may not yet feel their symptoms are at the point that they need to seek help. Past research has established that career concerns and negative mental health outcomes are interconnected and career counselors are not exempt from also navigating mental health concerns (Hinkelman & Luzzo, 2007; Dieringer et al., 2016). Providing proper training and education for career counselors can help them identify students who would benefit from a referral to a university counseling center while still providing introductory psychoeducation about the impostor phenomenon.

CONCLUSION

In the continued effort to increase retention, colleges and universities are assessing various factors that might facilitate students leaving before completing their degree. Research that continues to define and expand the conceptualization and mechanisms of the impostor phenomenon provide valuable insight into factors that are contributing to a variety of mental health concerns experienced by undergraduates that are known to impact retention. Future research into understanding the impostor phenomenon would benefit from exploring the

differential experiences of students of color and the cultural and institutional factors that may buffer or exacerbate impostorism. Future clinical work would benefit from adapting cognitive behavioral and skill-based strategies to alleviate impostor concerns while also endeavoring to collaborate with career counselors and other campus offices that could provide a point of intervention for impostors who have yet to seek counseling.

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