

SELF-COMPASSION, IMPOSTER PHENOMENON, AND RESILIENCE AMONG FIRST-GENERATION AND SECOND-GENERATION COLLEGE STUDENTS

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Abstract

This study examined imposter phenomenon, self-compassion, and resilience among first- and second-generation college students. Participants included 388 college students, including 184 (47.4%) first-generation students. Results indicated first-generation college students have higher levels of self-compassion than second-generations students. Additionally, there were significant correlations between all six components of self-compassion, although stronger for first-generation students. Imposter phenomenon was negatively correlated with resilience and was stronger for first-generation students indicating these students may exhibit less academic hardiness. Resilience and self-compassion were significantly correlated for both. Implications and recommendations for enhancing mental health and academic support for students with imposter phenomenon are discussed.

Keywords: imposter phenomenon, resilience, self-compassion, college students, academic performance

Introduction

College students frequently experience stress during various times throughout their college career due to increased responsibilities, changes in eating and sleep habits, poor time management skills, and work and social demands (Hudd et al., 2000). They must also navigate interactions with faculty and staff, striving to meet personal goals, adjusting to the campus environment, and facing a lack of familial and peer support (Huang & Lin, 2013). First-generation college students (those who are the first in their family to go to college) may have enhanced or additional stressors than second-generation college students (those who had a family member attend college before them), as first-generation students are more likely to be from lower income families and may have to work more or rely on financial aid in order to afford school (Gibbons, 2019). They also often have to navigate academia alone, since their families have never experienced college and are not able to fully understand the expectations and stressors (Peteet et al., 2015).

Self-Compassion

During tough times, being caring and kind to yourself, or having self-compassion, can be helpful (Wei et al., 2011). Self-compassion consists of three components. The first component, self-kindness versus self-judgement, is being gentle with yourself as opposed to being self-critical. The second component, common humanity versus isolation, is understanding that everyone goes through trials and tribulations and is part of the shared human experience. The third component, mindfulness versus over-identification is being able to acknowledge what you are going through is painful, but not letting that pain become your identity or focus (Neff & McGehee, 2010; Wei et al., 2011).

Researchers have found benefits of having self-compassion. Individuals may be happier and more optimistic, feel more connected, be better able to take constructive feedback, have increased confidence and less fear of failure, and have more initiative or intrinsic motivation (MacBeth & Gumley, 2012; Smeets et al., 2014). They may also have decreased depression and anxiety, self-consciousness, anger, closed-mindedness, and may keep from comparing themselves to others and dwelling on negative thoughts or experiences (MacBeth & Gumley, 2012; Neff & McGehee, 2010; Terry, Leary & Mehta, 2013). For college students specifically, those with self-compassion may be less likely to procrastinate and may believe in themselves more when it comes to getting good grades and achieving graduation (Smeets et al., 2014). They are also better able to accept responsibility for their grades, seek support when they are struggling with a concept or assignment, and try again if they do not initially succeed (Smeets et al., 2014).

Resilience

Resilience can be defined as how an individual handles difficult life events, such as chronic stress or trauma (Huang & Lin, 2013). Research has suggested resilience is a personality characteristic, and people who are more resilient have certain traits such as hope, optimism, empathy, communication, cognitive maturity, and self-efficacy. In addition, they are better able to emotionally handle negative situations and stress, and demonstrate strong problem-solving abilities and an internal sense of control (Huang & Lin, 2013; Shebuski et al., 2020).

As previously mentioned, college can already be a high stress time for students. When faced with adversity, such as the death of a loved one, students who are resilient may be affected but not become frozen by the adversity. That is, they may be able to push through with a smile on their face, continue to complete coursework and achieve goals, rebounding quickly from the experience of adversity (Guo, 2017; Huang & Lin, 2013). Individuals with resilience are better

able to reframe the negative experience and focus, instead, on strengths and opportunities (Kotera et al., 2021)

Students with lower resilience may internalize adverse situations more deeply, making it harder for them to move forward. As a result, they might become distracted from their schoolwork and less motivated to complete assignments, leading to low grades or missed work. This academic decline can, in turn, make them feel as though they are letting themselves or others down, increasing the risk of developing behavioral or mental health issues. Conditions such as depression or anxiety can then further diminish their motivation and academic performance, creating a harmful cycle (Huang & Lin, 2013). Further, studies have also found low levels of resilience to be associated with depression, neuroticism, perfectionism, and low self-esteem and to be predictive of anxiety/stress (Klibert et al., 2014). Mental illness, substance abuse, and suicide research suggests that college students often lack sufficient resilience traits (Oehme et al., 2019), as college students may be more likely to self-medicate than seek help from a professional therapist or counselor (Terry, Leary & Mehta, 2013).

Imposter Phenomenon

Imposter phenomenon is when someone feels like a fake or phony (Clance & Imes, 1978). For example, if a student gets accepted to the school of their choice, they may feel like they don't belong, their application was confused with someone else's, or they were admitted out of pity, or some external factor not based on merit. They may also fear someone will realize this one day, and in this example, may fear their acceptance will be revoked, leaving them to face the embarrassment of never graduating (Bravata et al., 2019; Parkman, 2016). This lack of confidence increases stress, and students may respond by either working hard to keep up their "fake front" or underperforming because they deem it as inevitable (Parkman, 2016; Ramsey &

Brown, 2018). Although originally found in high achieving women in academia, research has found imposter phenomenon to affect several diverse groups of people, with similar effects across this diversity, including mental health issues, anxiety and depression, increased stress, a negative self-image, and the belief that they aren't smart enough (Harvey & Katz, 1985; Parkman, 2016; Peteet et al., 2015; Ramsey & Brown, 2018).

The Present Study

Several studies have found resilience to be associated with self-compassion (Kotera & Ting, 2019; Kotera et al., 2021; Smeets et al., 2014) and, more specifically, that having self-compassion may actually increase one's resilience when faced with adverse situations (Lefebvre et al., 2020; Neff & McGehee, 2010; Shebuski et al., 2020). The inverse effect has also been found, as the more resilient characteristics one has, the more self-compassionate they are (Huang & Lin, 2013). For example, those who were more resilient did better in school, had more self-confidence, and had more coping skills in their toolbox to utilize, which then positively contributed to their resilience (Huang & Lin, 2013). However, no studies, to our knowledge, have examined the associations between self-compassion and imposter phenomenon or resilience and imposter phenomenon or specifically compared these variables to first-generation vs. second-generation college students.

Methods

Research Questions

The authors seek to answer five research questions. First, is there a difference in levels of self-compassion reported by first-generation college students versus second-generation college students? Second, what is the nature of the relationship between imposter phenomenon and self-compassion among first-generation and second-generation college students? Third, what is the nature of the relationship between imposter phenomenon and resilience among first-generation

and second-generation college students? Fourth, what is the nature of the relationship between resilience and self-compassion among first-generation and second-generation college students? Fifth, does student generation status moderate the relationship between self-compassion and imposter phenomenon?

Participants

Participants included 388 undergraduate and graduate college students. The majority of students were female (306; 79%), Caucasian (268; 69%), undergraduate students (240; 62%), and enrolled full time (315; 81%). Ages ranged from 18 to 72 with a mean age of 27.14 ($SD = 10.14$). The sample was balanced between first-generation students (184; 47%) and second-generation students (204; 53%). Many students reported working full time (102; 26%) or part time (197; 51%) while enrolled in their coursework. Over half of the sample reported grade point averages (GPA) ranging from 1.60 to 4.00 with a mean GPA of 3.52 ($SD = .49$). Eighty-four participants (21.6%) reported being a parent of one or more children, and participants lived in 22 different states across the United States. Table 1 includes additional demographic information.

Table 1

Demographic Characteristics of Participants (N = 388)

Characteristic	<i>n</i>	Percent of sample
Sex		
Female	306	78.9
Male	79	20.4
Non-Binary	2	0.5
Race		
Asian American	25	6.4
Black or African American	71	18.3
Caucasian or White	268	69.1
Hispanic or Latino	15	3.9
Native American or American Indian	2	0.5
Other/Multiracial	7	1.9

Classification		
Undergraduate Freshman	42	10.8
Undergraduate Sophomore	40	10.3
Undergraduate Junior	61	15.7
Undergraduate Senior	97	25.0
Graduate Student – Master’s level	98	25.3
Graduate Student – Doctoral level	50	12.9
First or Second-Generation Status		
First-Generation Student	184	47.4
Second-Generation Student	204	52.6
Work Situation		
Working full time	102	26.3
Working part-time	197	50.8
Not working	88	22.7
Enrollment Status		
Enrolled full-time	315	81.2
Enrolled part-time	67	17.3
Not enrolled but planning to complete degree	6	1.5
Transfer Status		
Transferred from a community college to university	125	32.2
Began/completed college at a four-year university	216	55.7
Transferred from one university to another university	32	8.2
Other	15	3.9

Procedure

Participants were recruited from a small southeastern university using Facebook posts and advertisements on a campus-wide weekly informational e-mail sent to students. Advertisements included a QR code and web link to an online questionnaire distributed via Qualtrics research platform. Students could scan the QR code or click the link to view the informed consent for the questionnaire. After indicating that they were 18 years of age or older and giving informed consent, participants could proceed to the survey questions. After completing the survey, participants were given the option to provide an e-mail address following the survey to enter to win one of four \$25 Amazon gift cards.

Instruments

Demographics. Participants completed a series of demographic questions including sex, age, race, type of institution attended, classification, enrollment status, GPA, first- or second-generation student status, state in which they lived, work status, and whether they had any children.

Imposterism Scale. To measure the level of imposter phenomenon, participants completed the Imposterism Scale (Leary et al., 2000). The Imposterism Scale is a self-report scale that asks participants to respond to seven statements by indicating the number on the scale that is most characteristic of themselves from 1 (not at all characteristic of me) to 5 (extremely characteristic of me). A sample item is, *“In some situations I feel like a ‘great pretender’; that is, I’m not as genuine as others think I am.”* In this study, Cronbach’s alpha coefficient for the Imposterism Scale was .93.

Brief Resilience Scale. Resilience was measured using the Brief Resilience Scale (BRS; Smith et al., 2008). The BRS is a self-report instrument that asks participants to choose the extent to which they agree with six statements using a Likert scale from 1 (strongly disagree) to 5 (strongly agree). A sample item includes, *“It does not take me long to recover from a stressful event.”* Scores on the BRS range from 6 to 30, with higher scores indicating greater resilience (Smith et al., 2008). In this study, Cronbach’s alpha coefficient for the BRS was .86.

Self-Compassion Scale. Self-compassion was measured using the Self-Compassion Scale (SCS; Neff, 2003). This self-report inventory asks participants to think of how they would typically act toward themselves in difficult times and answer questions such as, *“When something upsets me, I get carried away with my feelings.”* and *“I try to be loving towards myself when I’m feeling emotional pain.”* on a Likert scale from 1 (almost never) to 5 (almost always). Six subscales are included in the SCS: Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness, and Over-Identified. Higher scores on each subscale indicate greater

levels of engagement in that domain of behavior. A total self-compassion score can be calculated by reverse scoring the Self-Judgment, Isolation, and Over-Identified subscales and summing the total of all six subscales. Regarding total scores, higher scores indicate greater levels of self-compassion. In this study, Cronbach's alpha coefficient for the SCS as a whole was .94. Alpha coefficients for each subscale were .88 for Self-Kindness, .87 for Self-Judgment, .80 for Common Humanity, .82 for Isolation, .81 for Mindfulness, and .81 for Over-Identified.

Statistical Analyses

Data were analyzed using SPSS Version 26.0. Research question 1 was answered using an independent samples t-test, with a priori power analysis indicating a sample of 176 needed for .95 power to detect a medium effect size. Research questions 2, 3, and 4 were answered using Pearson's correlations, with a priori power analysis indicating a sample of 138 needed for .95 power to detect a medium effect size. Research question 5 was answered using a hierarchical linear regression, with a priori power analysis indicating a sample of 119 needed for .95 power to detect a medium effect size. Alpha levels were set at .05 for all analyses.

Results

Data Cleaning

A total of 475 participants responded to the Qualtrics survey. Seventy (15%) were excluded from analysis due to completing only the demographic questions and no survey instruments. Fourteen (3%) were excluded due to self-reporting that they were not college students. Three cases (0.6%) were identified as multivariate outliers according to Mahalanobis' distance ($\alpha = .005$; Jennings & Young, 1988) and were excluded from analysis. Cook's distance showed no cases with undue influence on the data set. After this cleaning process, a total of 388 (82%) participants were included in the data analysis. However, 23 (5%) participants completed the Imposterism Scale and BRS but did not complete the SCS and therefore were not included in

any analyses involving self-compassion, leaving a total sample of 365 (77%) for the self-compassion analyses.

Research Question 1

Is there a difference in the level of total self-compassion reported by first-generation college students versus second-generation college students? All assumptions (e.g., no outliers, approximately normal distribution, homogeneity of variances) were met for the data set. First-generation and second-generation college students were found to have statistically significantly different levels of self-compassion, $t(363) = 2.280, p = .023$, Cohen's $d = .238$, indicating a small effect size (Cohen, 1988). First-generation college students' mean self-compassion score was 5.21 (95% CI, 0.72 to 9.70) higher than second-generation college students. Because a difference was found in total self-compassion scores, additional independent samples t -tests were used to determine among which components of self-compassion the two groups were statistically different. Results indicated a statistically significant difference between groups in levels of self-kindness, $t(363) = 2.103, p = .036$, Cohen's $d = .220$, common humanity, $t(364) = 2.463, p = .014$, Cohen's $d = .256$, and over-identified, $t(364) = 2.902, p = .004$, Cohen's $d = .302$, with first-generation students displaying statistically significantly higher means in all three components of self-compassion. All relationships indicated a small effect size (Cohen, 1988). Table 2 presents mean scores by group for all variables.

Table 2

Descriptive Statistics for Self-Compassion, Resilience, and Imposter Phenomenon by Group (N = 365)

Variable	<i>M</i>	<i>SD</i>	Min	Max
First-Generation Students (n = 177)				
Total Self-Compassion	77.84	23.10	26	130

Self-Kindness	15.31	5.61	5	25
Self-Judgment	13.10	5.56	5	25
Common Humanity	13.03	4.18	4	20
Isolation	11.22	4.57	4	20
Mindfulness	13.69	3.90	4	20
Over-Identified	11.48	4.45	4	20
Imposter Phenomenon	14.74	7.15	7	35
Resilience	19.54	4.82	6	30
Second-Generation Students ($n = 188$)				
Total Self-Compassion	72.63	20.52	29	126
Self-Kindness	14.15	4.89	5	25
Self-Judgment	12.43	5.05	5	25
Common Humanity	11.99	3.93	4	20
Isolation	10.76	4.32	4	20
Mindfulness	13.05	3.78	4	20
Over-Identified	10.20	4.01	4	20
Imposter Phenomenon	14.00	6.47	7	33
Resilience	19.16	4.67	9	33

Research Question 2

What is the nature of the relationship between imposter phenomenon and self-compassion among first-generation and second-generation college students? All assumptions (e.g., linearity, no outliers, approximately normal distribution) were met for the data set. Pearson's correlations between imposter phenomenon and the six components of self-compassion were analyzed for each group. Results are shown in Table 3 and indicate statistically significant correlations between imposter phenomenon and all six components of self-compassion for both first-generation students and second-generation students. All effect sizes range from medium to large (Cohen, 1988). The positive components of self-compassion (self-kindness, mindfulness, and common humanity) show negative correlations with imposter phenomenon, and the negative components of self-compassion (isolation, over-identification, and self-judgment) show positive correlations with imposter phenomenon, indicating that as the practice of self-compassion increases, imposter phenomenon decreases among both groups. As

shown in Table 3, the relationships between imposter phenomenon and all components of self-compassion are stronger for first-generation students than for second-generation students.

Table 3

Correlations Between Self-Compassion Variables, Imposter Phenomenon, and Resilience by Group

	Imposter Phenomenon	Resilience	Imposter Phenomenon	Resilience
	First-Generation Students (<i>n</i> = 177)		Second-Generation Students (<i>n</i> = 188)	
Total Self-Compassion	-.586**	.616**	-.444**	.517**
Self-Kindness	-.483**	.425**	-.379**	.416**
Self-Judgment	.579**	-.556**	.423**	-.402**
Common Humanity	-.323**	.401**	-.144*	.269**
Isolation	.438**	-.552**	.413**	-.357**
Mindfulness	-.419**	.444**	-.280**	.445**
Over-Identified	.588**	-.635**	.428**	-.526**
Imposter Phenomenon	1	-.510**	1	-.300**

* = Correlation is significant at the 0.05 level (2-tailed). ** = Correlation is significant at the 0.01 level (2-tailed).

Research Question 3

What is the nature of the relationship between imposter phenomenon and resilience among first-generation and second-generation college students? All assumptions (e.g., linearity, no outliers, approximately normal distribution) were met for the data set. Pearson's correlation for imposter phenomenon and resilience among first-generation college students is statistically significant ($r = -.510, p < .001$) and represents a large effect size (Cohen, 1988). Pearson's

correlation for imposter phenomenon and resilience among second-generation college students is statistically significant ($r = -.300, p < .001$) and represents a medium effect size (Cohen, 1988). Among both groups, imposter phenomenon is negatively correlated with resilience, indicating that as resilience increases, imposter phenomenon decreases. This relationship is stronger for first-generation students than for second-generation students.

Research Question 4

What is the nature of the relationship between resilience and self-compassion among first-generation and second-generation college students? All assumptions (e.g., linearity, no outliers, approximately normal distribution) were met for the data set. Pearson's correlations for resilience and total self-compassion among first-generation students ($r = .616, p < .001$) and second-generation students ($r = .517, p < .001$) yielded statistically significant results with large effect sizes (Cohen, 1988). Pearson's correlations between resilience and the six components of self-compassion were analyzed for each group. Results are shown in Table 3 and indicate statistically significant correlations between resilience and all six components of self-compassion for both first-generation students and second-generation students. All effect sizes range from medium to large (Cohen, 1988). As shown in Table 3, with the exception of mindfulness, the relationships between resilience and all components of self-compassion are stronger for first-generation students than for second-generation students. The positive components of self-compassion (self-kindness, mindfulness, and common humanity) show positive correlations with resilience, and the negative components of self-compassion (isolation, over-identification, and self-judgment) show negative correlations with resilience, indicating that as the practice of self-compassion increases, resilience increases among both groups.

Research Question 5

Does student generation status moderate the relationship between self-compassion and imposter phenomenon? All assumptions (e.g., normality, linearity, homoscedasticity, no multicollinearity) for hierarchical linear regression were met for the data set. In the first step, two variables were included: student generation status and self-compassion. These variables accounted for a significant amount of variance in imposter phenomenon, $F(2, 362) = 68.632, p < .001$, with an R^2 of 27.5% and an adjusted R^2 of 27.1%, a large effect size according to Cohen (1988). Next, the interaction term between student generation status and self-compassion was added to the regression model. The interaction effect did not account for a significant proportion of the variance in imposter phenomenon, $\Delta R^2 = .004, \Delta F(1, 361) = 2.233, p = .136$. Therefore, student generation status does not evidence a statistically significant moderating effect on the relationship between self-compassion and imposter phenomenon.

Discussion

The current study examined five research questions related to imposter phenomenon, self-compassion, and resilience between and among first-generation and second-generation college students. First-generation college students were found to display statistically significant higher levels of self-compassion than second-generation college students. When examined in more detail, first-generation students scored significantly higher than second-generation students across three of the six components of self-compassion, two positive components of self-compassion (self-kindness and common humanity) and one negative component of self-compassion (over-identified). Increasing years of study have been linked to significantly higher rates of burnout, while self-compassion scores have been associated with less risk of academic burnout. These combined findings suggest that campus interventions related to self-compassion

as a “potentially protective skill” (Martinez-Rubio et al., 2021, p. 3398) against burnout, though beneficial for all students, may need to be even more heavily promoted for second-generation students and increasingly so for all students as they progress through their degree programs (Martinez-Rubio et al., 2021; Sirois, 2012).

Imposter phenomenon was found to be significantly correlated with all six components of self-compassion (self-kindness, mindfulness, common humanity, isolation, over-identification, and self-judgement) for both first-generation and second-generation college students, with the relationship between imposter phenomenon and self-compassion for first-generation students stronger than for second-generation students. As one might suspect, the positive components of self-compassion (self-kindness, mindfulness, and common humanity) were negatively correlated with imposter phenomenon, while the negative components of self-compassion (isolation, over-identification, and self-judgment) were positively correlated with imposter phenomenon. As self-compassion embodies a mindful awareness of one’s imperfections that leads toward positive change and away from an over-identification with faults (Neff, 2003), it seems that self-compassion would facilitate a student’s recognition of their own areas for improvement that ultimately results in resilience, positive affect, and improvement, as opposed to the feeling of being “stuck”, that can be associated with imposter phenomenon (Murn & Steele, 2020; Palmer, 2021). With interventions to increase the positive aspects of self-compassion and decrease the negative aspects of self-compassion, students could engage in a form of emotional regulation, balancing their need for improvement in key areas while rectifying any unproductive patterns of behavior in ways that ultimately lead to the realization that one’s weaknesses, doubts, and failures are not relegated to their own individual experience, but, instead, part of the overall human condition and experience (Neff, 2003).

Though imposter phenomenon and resilience were found to be negatively correlated with resilience among both first- and second-generation students, this relationship between imposter phenomenon and resilience was stronger for first-generation students than second-generation students. This finding suggests first-generation students may be less likely to exhibit resilience academically.

Resilience and all six components of self-compassion were significantly correlated for both first-generation and second-generation students, with first-generation students showing stronger relationships between resilience and self-compassion with the only exception being the component of mindfulness. As expected, the positive components of self-compassion (self-kindness, mindfulness, and common humanity) were positively correlated with resilience, while the negative components of self-compassion (isolation, over-identification, and self-judgment) were negatively correlated with resilience. These findings fit with the general definition of self-compassion as compassion directed toward self, especially in the midst of challenging, difficult circumstances (Terry, Leary, Mehta, & Henderson, 2013). For both groups, then, as self-compassion practices increase, so does resilience. These findings seem to give further credibility to self-compassion as a protective factor for undergraduate students, as prior research has suggested undergraduate students could be trained on their self-compassion abilities to help avoid burnout phenomenon in order to persist in their studies and careers and avoid such self-handicapping stressors as procrastination on academic work (Martinez-Rubio et al., 2021; Sirois, 2012). The impact of self-compassion on physical health and health outcomes has historically been linked with increased self-regulatory resources needed for self-care and compliance with medical recommendations (Terry, Leary, & Mehta, 2013; Dunne et al., 2018). As self-compassionate individuals are found to have enhanced health outcomes, even in the midst of obstacles to meeting physical health goals, perhaps the current study suggests equal attention

should be given to self-compassion interventions for enhanced resilience in the academic arena, as well (Sirois et al., 2015). The moderating effect of student generation status on the relationship between self-compassion and imposter phenomenon was not supported. This finding suggests that strategies to cultivate self-compassion at the college-level could disrupt college students' experience of imposter phenomenon and its resulting academic impacts across the board, regardless of first-generation or second-generation status.

Limitations

One limitation of the study relates to the recruitment pool of participants. With participants exclusively selected from one university campus, it is certainly possible that findings may not be broadly representative of student experiences across college campuses but, instead, may reflect only factors distinctive for that one environment. In addition, the vast majority of included participants were female (79%), a factor that tends to be associated with higher levels of imposter phenomenon, though that finding is not conclusive, with the suggestion that females may be more apt to admit their experience of imposter phenomenon than males (Pinto-Powell, 2018). The racial make-up was comprised of majority Caucasian participants (69 %) and, therefore, may not have been as reflective of the minority student's experience, which tends to be more positively correlated with imposter phenomenon, a key factor investigated in the current study. For example, minority students who study in predominantly white environments experience higher levels of imposter phenomenon, which may lead them to question their belonging and even suspect they are merely products of affirmative action (Palmer, 2021). Though the current study did not examine microaggressions, as related to imposter phenomenon, a review of the literature indicates there is an intersectionality of the experience of microaggressions and their resulting psychological harms and negative physical impacts with imposter phenomenon and stereotype threat (Skinta & Torres-Harding, 2022). In essence,

students' sense of safety and belonging is compromised by the experience of microaggressions, and they may see their potential for success in the academic culture as significantly compromised (Skinta & Torres-Harding, 2022; Mills, 2020; Salami et al., 2021).

Recommendations

With resilience linked to a more positive perception of the educational environment and a decreased risk for burnout, it stands to reason that strategies to promote resilience in both first- and second-generation college students are needed, with increased emphasis on first-generation students (Camara et al., 2022). Embedded in the above discussions of the findings was the theme of self-compassion strategies and interventions to build resilience, all with the goal of combating imposter phenomenon and resulting burnout. If the college campus environment would strive to create a climate of mental and emotional health by promoting self-compassion and mindfulness activities, the experience of imposter phenomenon might not necessarily result in burnout and attrition. Issuing statements of belonging from the very onset for students, with repeated reminders and a climate that reinforces students' sense of belonging, could also combat imposter phenomenon and promote resilience. Pinto-Powell (2018) went so far as to imagine a welcome address for students, as follows:

“Welcome, Class of 2023. Whether you received your acceptance letter a year ago, six months ago or six days ago, you are here because you belong. We do not need you to be special; we need you to be you. You are enough.”

In addition, college mental health services could offer informational sessions on imposter phenomenon, self-compassion, and resilience to normalize students' experience of imposter phenomenon and arm them with strategies and interventions to combat those feelings and doubts when they arise. Practicing mindfulness by learning to recognize when feelings of imposter phenomenon surface and countering them with self-compassion should be prioritized strategies

college campuses promote with their student population. Doing so could potentially prevent academic burnout and even result in a positive impact on retention and completion.

Opportunities for students to share their experiences with imposter phenomenon could also normalize those feelings and give students a valuable sense of community and support, which could be vital supports in confronting the isolating feelings often associated with imposter phenomenon wherein students believe they are “the only one” to have such doubts and insecurities (Palmer, 2021).

Just as interventions, mental health supports, and strategies for coping with impostor phenomenon, organizational interventions and institutional supports to confront, reduce, and even prevent the occurrences of microaggressions are also recommended (Mills, 2020; Camara et al., 2022). In this way, targeting the source and effective treatment of microaggressions in the student experience within the university culture may disrupt the experience of imposter phenomenon and stereotype threat, as well, for a significant portion of university students and ultimately serve as a protective factor for maintaining diversity in our student populations (Mills, 2020; Naik, 2021). Husbands et al. (2022) reported the importance of working to create social spaces that are comfortable, safe, and free from competition for students from underrepresented groups to experience feelings of belonging and be able to express themselves authentically in order to promote resiliency and reduce feelings of imposterism.

An institutional effort to examine how administrators, faculty, and staff behavior may enhance or detract from a student’s sense of worth or belonging may mitigate the impact of imposter phenomenon and assist in building a vital sense of community for the collective campus community. One example of such an effort is the Association of College and University Educators (ACUE), a national organization that delivers high-quality faculty development with

the goals of student success and equity. Through their instruction, ACUE equips with evidence-based practices to address a primary goal of strengthening student belonging and achievement. Faculty and staff enrolled in ACUE trainings can earn microcredentials and certifications on highly effective practices that can be implemented immediately with students to bolster student engagement, motivation, and success. Partnering universities have benefited with higher student retention rates, increased equity outcomes, and a decrease in poor academic performance and course withdrawals (Association of College and University Educators, n.d.). ACUE currently offers institutional training for faculty and staff on “Fostering a Culture of Belonging” that includes modules focused on: “Managing the Impact of Biases”; “Reducing Microaggressions”; Addressing Imposter Phenomenon and Stereotype Threat”; and “Cultivating an Inclusive Environment”. Engaging and educating faculty, staff, and students about imposter phenomenon and being intentional programming and services offered at institutions of higher learning that normalize and address imposter phenomenon may serve to mitigate its impact in the academic environment for both students and institutions.

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