



## Finding Satisfaction in Belonging: Preservice Teacher Subjective Well-Being and its Relationship to Belonging, Trust, and Self-Efficacy

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The well-being of teachers and preservice teachers has been a topic extensively explored through the lens of burnout and stress. Despite its manifold benefits, few studies have explored PST well-being through the lens of subjective well-being. Grounding our study in positive psychology, we explore the relationships between preservice teachers' subjective well-being, program sense of belonging, relational trust, and self-efficacy. Our participants included 63 multiple- and single-subject preservice teachers in a major university teacher education program in the western United States. They were surveyed in May 2019 in the final month of completing their program. We found that sense of belonging, relational trust, and self-efficacy individually are positively associated with well-being. A mediation analysis revealed that the relationship between relational trust and subjective well-being is mediated by program sense of belonging, which may indicate the importance of cohesion in a cohort-based teacher education program.

Keywords: preservice teachers, well-being, sense of belonging, trust, self-efficacy

1

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#### INTRODUCTION

Teacher well-being is a topic that has extensively been explored through the lens of stress and burnout (Split et al., 2011; Zee and Koomen, 2016). Moreover, the stress and burnout experienced by preservice teachers as they finish their program and make the transition from a teacher education program to the first few years in the classroom has received attention from several scholars (e.g., Hong, 2010; Kim et al., 2017). Preservice teachers and early career teachers frequently face unique stressors and dilemmas that differ from their more experienced peers (Kyriacou, 2001; Pillen et al., 2013). Learning to teach is often characterized by self-doubt, strong emotions, vulnerability, and stress, which can result in preservice teachers leaving their programs and early career teachers leaving the profession altogether (Richmond et al., 2011; Ingersoll et al., 2018). For example, preservice teachers may learn that the type of teacher they thought they would be upon entering the profession is not congruent with the type of teacher they become in their student teaching placement or as they transition into the first years of teaching (Nichols et al., 2017; Sydnor, 2017).

Given that learning to teach and teaching are both stressful endeavors (Kyriacou, 2001; Johnson et al., 2005), it is understandable that most research on teacher and preservice teacher well-being has focused on job satisfaction or negative feelings, like stress and burnout (Zee and Koomen, 2016). This means, however, that few studies have explored the well-being of preservice teachers through the lens of positive psychology (Seligman and Csikszentmihalyi, 2000) or positive organizational scholarship (Cameron and Caza, 2004). Scholars of positive psychology and well-being posit that the absence of

negative feelings, like stress, does not necessarily translate to happiness or fulfillment. In other words, preservice teachers who do not feel stress are not necessarily experiencing well-being—rather, they are simply experiencing the absence of bad feelings. Moreover, these scholars take an asset-based view of well-being—they explore the factors that *bring about* well-being as opposed to those that *reduce* negative factors related to well-being: stress, anxiety, etc. (Seligman and Csikszentmihalyi, 2000). The purpose of current study is to explore factors related to happiness—or the subjective well-being (SWB)—of preservice teachers as they complete their programs and to bridge this gap in the literature.

SWB is often measured through a combination of high positive affect, low negative affect, and overall life satisfaction (Deci and Ryan, 2008). Life satisfaction is seen as the cognitive component of SWB that reflects feelings of happiness with one's current life situation (Pavot and Diener, 2009). In this paper, we focus on life satisfaction, and use the terms life satisfaction and SWB interchangeably.

Studies have linked SWB to a host of positive outcomes, including better health (Diener and Chan, 2011), better relationships (Lyubomirsky et al., 2005; Diener and Biswas-Diener, 2008), improved job performance (Jones, 2006; Duckworth et al., 2009), and improved resiliency when faced with challenges (Fredrickson, 1998, 2001). Some scholars have averred that improving the well-being of people should be a central focus of governments (Diener and Seligman, 2004; Marks and Shah, 2004). Personal well-being is an important end in and of itself, but improving the well-being of everyone would lead to a better society for all (Marks and Shah, 2004; Lyubomirsky et al., 2005).

Given the difficulties and struggles of learning to teach, we believe it is important to examine factors related to SWB in preservice teachers, as this can potentially buoy their learning, resilience, and motivation. In this paper we add to the literature on preservice teacher well-being by exploring the following question: What is the relationship between preservice teachers' SWB and their sense of belonging to their program, trust in peers, and self-efficacy? To answer this question, we examined the SWB of 63 preservice teachers in two cohorts (one multiple-subject and one single-subject) who were in the final month of their university-based, graduate-level teacher education program in the western United States.

#### LITERATURE AND FRAMEWORKS

In a recent review of the literature, Zee and Koomen (2016) revealed that the vast majority of studies on teacher well-being have explored it through either a lens of stress and burnout or a lens of job satisfaction and commitment. For example, studies of stress have found that it is linked to lower psychological and physical health and leads to poor teacher performance and poor student outcomes (Day and Gu, 2014; Greenberg et al., 2016). Research focused on job satisfaction—which tends to be rooted in the day-to-day work of the job, namely interactions with students (Klassen and Chiu, 2010; Zembylas and Papanastasiou, 2005,

2006)—has shown that it is related to motivation and engagement (Zembylas and Papanastasiou, 2005) and is a decisive element in influencing teachers' attitudes, performance, and commitment to teaching (Zembylas and Papanastasiou, 2005; Caprara et al., 2006a; Klassen and Chiu, 2010).

When teachers do not feel a sense of well-being, their students' well-being can also be negatively impacted, as teachers' emotions have a direct relationship to their students' emotions (Becker et al., 2014). It is therefore significant that while there is a wide body of research on teacher well-being via stress, burnout, and job satisfaction, there is a paucity of research on the SWB of teachers. Moreover, even fewer studies have explored the SWB of preservice teachers.

## Subjective Well-Being

We define well-being as "optimal psychological experience and functioning," (Deci and Ryan, 2008, p. 1). In surveys that measure well-being, participants are asked to *subjectively* evaluate their overall feelings of wellness (Deci and Ryan, 2008), and we focused our inquiry on these subjective feelings. Subjective well-being, or SWB, has often been understood as having a high level of positive affect, a low level of negative affect, and a high degree of overall life satisfaction (Deci and Ryan, 2008). As mentioned above, life satisfaction is thought to be the cognitive component of SWB that reflects feelings of happiness with one's current life situation (Pavot and Diener, 2009).

Antecedents of SWB are often rooted in happiness and in finding meaning in life via work, family, relationships, and personal growth indicators (Reis et al., 2000; Helliwell and Putnam, 2007; Delle Fave et al., 2011). For example, a sense of trust—generalized trust as well as trust of neighbors and colleagues—has been found to be positively related to SWB (Bjørnskov, 2003; Helliwell and Putnam, 2007). Helliwell and Wang (2011) argued, "trust and well-being are tightly linked" (p. 56). Additionally, sense of belonging and increased social capital (Helliwell and Wang, 2011; Maass et al., 2016) as well as self-esteem and a sense of coherence in life (Maass et al., 2016) are also strongly related to SWB, as are prosocial behaviors, like helping others, cooperating, and feeling empathy (Caprara and Steca, 2005).

Increased SWB is related to a host of positive outcomes, such as improved health and longer life (Diener and Chan, 2011). People who report increased SWB tend to be more open-minded, more creative, and more open to learning and taking chances (Fredrickson, 2001). In their review of literature around SWB, Lyubomirsky et al. (2005) found increased SWB to be related to a more positive view of self and others and to an increased ability to cope with stress. Additionally, they found that longitudinal studies have shown a positive relationship between SWB, being more productive in work, and having more satisfying relationships. Erdogan et al. (2012) found that people who are happier tend to "form attachments to others, treat others better, and are treated better by others" (p. 1067). In general, people with higher SWB tend to find success in work, love, and health outcomes (Lyubomirsky et al., 2005; Erdogan et al., 2012).

Despite this range of positive outcomes associated with SWB, few studies have explored SWB in teachers, and even fewer have

explored SWB in preservice teachers. As noted above, many studies of teachers' well-being have focused on job satisfaction (Zee and Koomen, 2016). Notably, life satisfaction and work satisfaction have been shown to have a moderate positive correlation (Diener, 2009). Bowling et al. (2010) conducted a meta-analysis to examine the relationship between job satisfaction and life satisfaction and found a correlation of r = 0.40 between the two constructs. Jones (2006) found that life satisfaction is a stronger predictor of job performance than job satisfaction.

In one of the few studies exploring SWB in educators, Duckworth et al. (2009) examined life satisfaction among Teach for America corps members and found that students whose corps members reported higher levels of SWB performed better academically. Recently, Braun et al. (2020) found that students whose teachers had greater life satisfaction exhibited more prosocial behaviors in class. And Lent et al. (2011) found that job satisfaction was related to increased life satisfaction among Italian teachers, and that making progress toward work related goals was positively related to their life satisfaction.

As noted earlier, learning to teach can be a stressful and doubt-filled endeavor (Kyriacou, 2001; Johnson et al., 2005). Finding avenues to increase SWB in preservice teachers could provide a host of benefits for teacher educators, preservice teachers, early career teachers, and their students. Moreover, increasing the SWB of preservice teachers is a laudable goal unto itself. The research also makes clear the positive relationships between sense of belonging, trust, self-efficacy, and SWB. We explore the literature on each below.

## Sense of Belonging

In their germinal paper, Baumeister and Leary (1995) posited that "human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant personal relationships" (p. 497). In other words, humans have a fundamental need to feel a sense of belonging with others. Belonging is fundamental to "who we are and what we are ... [it is] part of what constitutes our identity, whether we are explicitly aware of it or not" (Miller, 2003, p. 217). Having a sense of belonging to a group contributes greatly to people's sense of purpose and meaning in life (Haslam et al., 2009; Lambert et al., 2013). Moreover, it plays a fundamental role in identity formation and well-being (Wenger, 1998; Bettez, 2010; Helliwell and Wang, 2011). In short, we find meaning, identity, relevance, and life satisfaction through belonging (Allen, 2020).

We define a sense of belonging as feeling connected to or fitting in with a group or organization and feeling valued by that group (Hagerty et al., 1992; Mahar et al., 2013). In education contexts, a sense of belonging with peers, teachers, or a school can increase students' motivation, persistence, and achievement (Walton and Cohen, 2011; Walton et al., 2012; Bjorklund, 2019). In short, students' sense of belonging is fundamental for facilitating a positive learning environment.

There is a growing body of research on sense of belonging for students in undergraduate settings. For example, scholars have found that sense of belonging is strongly related to first-year college students' retention and persistence (Hausemann et al.,

2007; Hausemann et al., 2009; Morrow and Ackerman, 2012). Moreover, students with a stronger sense of belonging are more motivated to learn, have an easier time communicating with faculty, and are more likely than peers who report a lower sense of belonging to seek out support when they need it (Levett-Jones and Lathlean, 2008; Strayhorn, 2012). Feeling a sense of belonging in undergraduate classrooms has also been linked to academic self-efficacy and motivation (Freeman et al., 2007) and improved academic outcomes (Kernahan et al., 2014). Additionally, sense of belonging creates classrooms that are more conducive to learning and risk taking (Booker, 2016).

Despite the growing research and positive outcomes related to sense of belonging in undergraduate settings, there is a dearth of research on the topic in postgraduate settings, such as teacher education programs (e.g., Bjorklund et al., 2020; Bjorklund and Daly, 2021). One of the main goals of this paper is therefore to address this gap in the literature. Bjorklund et al. (2020) found that a sense of belonging can give preservice teachers a space where they feel confident to grow and develop as teachers and increase feelings of teacher self-efficacy; we theorize that sense of belonging within a teacher education program will also be related to feelings of SWB for preservice teachers.

The benefits related to a sense of belonging enumerated above—self-efficacy, persistence, motivation, and so on—all have a relationship to SWB. Moreover, sense of belonging is rooted in peer-to-peer relationships and teacher–student relationships (Juvonen, 2006; Allen et al., 2018; Bjorklund, 2019) and relationships are a core component of well-being (Reis et al., 2000; Lyubomirsky et al., 2005). On a macro scale, public opinion data have linked sense of belonging to a community or country with increased SWB (e.g., Helliwell and Wang, 2011). We similarly believe that feeling a sense of belonging to a teacher education program will increase SWB among preservice teachers. As such, our first hypothesis is as follows:

**Hypothesis 1:** For preservice teachers, sense of belonging to a teacher education program is positively related to SWB.

#### **Relational Trust**

As with sense of belonging, trust is fundamentally relational (Rousseau et al., 1998; Hoy and Tschannen-Moran, 1999; Bryk and Schneider, 2002). We define relational trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al., 1998; p. 395). Research has shown that relational essential in all school-based relationships: teacher-principal, teacher-teacher, teacher-student, and so on (Tschannen-Moran, 2014a; 2014b). It is integral to human learning and is critical in any learning environment (Rotter, 1967; Edmonson, 2004; Hoy and Tschannen-Moran, 2007). Trusting relationships in organizations and schools are associated with increased sharing, communication, and collaboration (Dirks and Ferrin, 2001; Liou and Daly, 2014; Leana and Pil, 2017). Moreover, trust in colleagues is strongly related to SWB (Helliwell and Wang, 2011).

Teachers who trust other actors in their schools report higher levels of job satisfaction (Van Maele and Van Houtte, 2012).

Increased teacher trust in school leadership is related to increased positive beliefs around reform efforts (Liou et al., 2019). When teachers trust each other, they also tend to trust their students (Bryk and Schneider, 2002), and teacher trust in students is positively related to a host of benefits, including increased academic achievement (Goddard et al., 2009; Tschannen-Moran, 2014a) and increased feelings of belonging (Van Maele and Van Houtte, 2012; Allen et al., 2018). For early career teachers, relational trust with colleagues is positively associated with staying in the same school during their first 5 years of teaching (Hopkins et al., 2019).

Few studies have explored trust in preservice teachers, despite its manifold benefits (Liou et al., 2017). Liou et al. (2017) found that preservice teachers who reported higher levels of trust also had higher levels of academic achievement and increased feelings of teacher self-efficacy, and they were more likely to support and seek out support from their peers. Creating a trusting environment for learning that supports sharing and collaboration is vital for preservice teachers' learning (Liou et al., 2020).

We similarly argue that creating a trusting environment within teacher education programs is vital for ensuring SWB among preservice teachers. Despite the fact that large-scale research has found generalized trust and trust in neighbors and colleagues to have positive relationships to SWB (Bjørnskov, 2003; Helliwell and Putnam, 2007; Helliwell and Wang, 2011), Helliwell and Wang (2011) argued that the relationship between trust and SWB has been largely unexplored—and this is especially true for preservice teachers. Given prior findings, our second hypothesis is as follows:

**Hypothesis 2:** Relational trust between preservice teachers will be positively related to preservice teachers' SWB.

### **Teacher Self-Efficacy**

Finally, scant attention has been given to the link between teacher self-efficacy and SWB, especially among preservice teachers. Bandura (1997) defined self-efficacy as a future-oriented belief that an individual can successfully execute a task or, in the case of teacher, educate their students. Bandura (2001) further suggested that people buoy their resilience in the face of obstacles when they believe that they can achieve their goals and stave off negative outcomes. In his review of the literature, Pajares (1996) contended:

Efficacy beliefs help determine how much effort people will expend on an activity, how long they will persevere when confronting obstacles, and how resilient they will prove in the face of adverse situations—the higher the sense of efficacy, the greater the effort, persistence, and resilience. Efficacy beliefs also influence individuals' thought patterns and emotional reactions (p. 544).

For teachers specifically, self-efficacy is "a judgment of his or her capabilities to bring about desired outcomes of students' engagement and learning" (Tschannen-Moran and Hoy, 2001, p. 783). Knoblauch and Woolfolk Hoy (2008) argued that "teachers' efficacy beliefs have a profound effect on the educational process" (p. 166); others have noted that teacher self-efficacy is positively related to myriad beneficial outcomes (Zee and Koomen, 2016),

including teacher commitment, motivation, and well-being (Flores, 2006; Gu and Day, 2007; Day, 2008). Teachers with higher self-efficacy frequently report less emotional exhaustion and burnout (Skaalvik and Skaalvik, 2010, 2014), less stress (Skaalvik and Skaalvik, 2016), and increased engagement (Day and Gu, 2009).

Several studies have found a positive relationship between self-efficacy and job satisfaction in teachers (e.g., Caprara et al., 2006a; Klassen and Chiu, 2010; Collie et al., 2012; Skaalvik and Skaalvik, 2014; Van Maele and Van Houtte, 2015). Job satisfaction is a domain-specific measure of well-being and, as noted above, has been shown to have a 0.40 correlation with life satisfaction (Bowling et al., 2010). In one of the few studies that looked at life satisfaction in teachers, Lent et al. (2011) found that self-efficacy was indirectly related to life satisfaction and was mediated by progress toward goals.

Self-efficacy also has a host of benefits for early career teachers. For example, those who begin their teaching careers with high levels of self-efficacy are more motivated and have higher levels of persistence (Bandura, 1997; Tschannen-Moran and Johnson, 2011). Teacher self-efficacy is a strong indicator of early career teachers' commitment and the decision to stay in or leave the profession (Bandura, 1997; Kim et al., 2017; Johnson and Birkeland, 2003). And, just as self-efficacy helps early career teachers cope with doubts and struggles of learning to teach (Yost, 2006), maintain a more positive attitude (Gu and Day, 2007), and palliate feelings of burnout (Hong, 2010), we believe that it may have similar effects on preservice teachers.

Recently, Bjorklund et al. (2020) explored self-efficacy in seven cohorts in three teacher education programs and found a positive relationship between preservice teachers' centrality in a support network, feelings of belonging to their teacher education program, and teacher self-efficacy. Additionally, Liou et al. (2017) found a positive relationship between selfefficacy and preservice teachers' academic performance. Some studies have found that preservice teachers' self-efficacy increases during their time in a teacher education program and decreases in the 1st year of teaching (Woolfolk Hoy and Burke Spero, 2005; Bokhove and Downey, 2018). This, combined with the finding that early career teachers who have and maintain high levels of self-efficacy when they enter the workforce are better able to deal with feelings of isolation and reality shock (Flores, 2006), shows the importance of self-efficacy for preservice teachers.

Zee and Koomen (2016) posited that for preservice teachers, early career teachers, and veteran teachers of all grade levels, self-efficacy in teaching is related to lower stress, lower levels of burnout, and increased levels of commitment and job satisfaction. With few exceptions (e.g., Wheatley, 2002), self-efficacy seems to be related to positive outcomes for preservice teachers. One area that has been understudied, however, is the relationship between teacher self-efficacy and SWB in preservice teachers. There have been studies that have found positive relationships between various facets of self-efficacy and SWB (e.g., Caprara et al., 2006b; O'Sullivan, 2011). Self-efficacy is a multifaceted construct (Bandura, 1997), however, and its presence in one area of life does not necessarily indicate its presence in another.

**TABLE 1** | Descriptive statistics multiple- and single-subject cohorts (N = 63).

	Mean	SD	Min	Max
Dependent variable				
Life satisfaction	4.90	1.69	1	8.2
Independent variables				
Program belonging	6.52	1.91	1	9
Trust	6.53	1.46	2.57	9
Omnibus teacher self-efficacy	6.12	0.96	4.17	8.67
Demographic controls				
Female	0.76		0	1
Ethno-racial group identity				
White	0.44			
Latinx	0.17			
Black	0.02			
Asian	0.24			
Middle Eastern/Arab	0.02			
More than one group	0.11			
Age	24.59	2.35	21.40	32.30
Undergraduate GPA	3.41	0.29	2.88	4.00
Multiple-subject cohort	0.60		0	1

That said, various types of social, emotional, and relational self-efficacy have been shown to be related directly and indirectly to SWB in individuals ranging from adolescents to the elderly (Caprara and Steca, 2005; Caprara et al., 2006b). Hampton (2004), for example, found that general self-efficacy was related to the well-being of a sample of individuals who had suffered spinal cord injuries. O'Sullivan (2011) found that academic self-efficacy contributed to life satisfaction among a group of undergraduate students. And Vecchio et al. (2007) found that academic and social self-efficacy were positively related to life satisfaction in seventh- and eighth-grade students, accounting for more of the variance in life satisfaction than academic success or popularity. Interestingly, self-efficacy beliefs among these students were also positively related to life satisfaction 5 years later, and an increase in selfefficacy over the 5 years was related to increased life satisfaction. This finding led the authors to suggest that self-efficacy beliefs are a long-term predictor of life satisfaction. Overall, these studies lead us to believe that teacher self-efficacy will be related to SWB in preservice teachers. Thus, our third hypothesis is as follows:

**Hypothesis 3:** Teacher self-efficacy is positively related to SWB among preservice teachers.

#### **METHODS**

## **Data Collection and Sample**

The current research was conducted in a university teacher education program in the southwestern United States. We surveyed 63 preservice teachers (38 in the multiple-subject cohort and 25 in the single-subject cohort) in May 2019 (see **Table 1**). The first author went to a class for each cohort to describe the study, and preservice teachers were given time in class to complete the survey. Consent forms to participate in this study were signed in October 2018 as part of a larger study. We should note that while this is a small sample, we believe it is representative of other post-graduate teacher education programs

in the region in terms of demographics (e.g., similar ethno-racial composition, gender identity composition, socio-economic status, and age range) and in coursework. Moreover, its mission of teaching for social justice and placing student teachers in low-income schools with large minoritized populations is similar to other programs in the region.

#### **Variables**

In our study, we used four scales to measure our variables of interest: SWB (life satisfaction), program sense of belonging, relational trust, and teacher self-efficacy. Each scale has been validated in prior research and was generated by taking the average score of the items in the scale. We describe each in more detail below.

#### Dependent Variable: Life Satisfaction

We used a scale created by Diener et al. (1985) to measure the cognitive aspect of SWB. This scale has been used widely and validated in a variety of contexts since its inception (Pavot and Diener, 2009). For each item in the scale, we utilized a Likert scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). Sample items included "In most ways, my life is close to ideal" and "I am satisfied with my life." Our scale had a Cronbach's alpha of 0.81. A higher score indicates a higher level of life satisfaction.

#### Independent Variable: Program Sense of Belonging

We understand sense of belonging to be preservice teachers' feelings that they are a part of and valued by their teacher education program in general, which encompasses faculty, cooperating teachers, positive learning environments, and ideological fit. We used a variable incorporated in past research (Bjorklund et al., 2020) that was modeled on a previously validated scale (Anderson-Butcher and Conroy, 2002) to fit the context of the teacher education program in the study. Each item utilized a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). Items in the scale included "I feel supported in the program" and "I am accepted by the program." A higher score indicates a greater sense of belonging to the program in general. The items had a Cronbach's Alpha of 0.94.

#### Independent Variable: Relational Trust

We used the relational trust scale created by Hoy and Tschannen-Moran (2007) to measure peer-to-peer trust, and altered it slightly to fit our context. Examples of items in the scale were "I trust people in my cohort" and "Even in difficult situations, I can depend on the people in my cohort;" each utilized a Likert scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). A higher score indicates stronger feelings of relational trust toward peers in the program. The items in the scale had a Cronbach's Alpha of 0.93.

#### Independent Variable: Teacher Self-Efficacy

We drew upon a teacher self-efficacy scale that has been used and validated in prior work (Tschannen-Moran and Hoy, 2001). This scale has a well-established three-factor solution—self-efficacy for classroom management, self-efficacy for student engagement,

and self-efficacy for instructional strategies. However, Tschannen-Moran and Hoy, 2001 noted that this factor solution is "less distinct" (p. 799) for preservice teachers. Moreover, Tschannen-Moran and Hoy, 2001 and Fives and Buehl (2010) argued that because the three-factor solution may be inadequate for preservice teachers, a single-factor selfefficacy scale may be more appropriate. As such, we used a singlefactor omnibus or general teaching efficacy scale ( $\alpha = 0.88$ ), with all 12 items in line with prior studies of preservice teachers and self-efficacy (Tschannen-Moran and Hoy, 2001; Putman, 2012; Bjorklund et al., 2020). Example items are "To what extent can you use a variety of assessment strategies?" and "How well can you establish a classroom management system with each group of students?" Each item used a Likert scale ranging from 1 (Nothing/ Not at All) to 9 (A Great Deal). A higher score indicates a higher sense of teacher self-efficacy.

#### Control Variables: Demographics

We included five demographic variables that are not shown in our models, as they were not the focus of our study. In all regression models (described below) we controlled for gender, ethno-racial group, age, undergraduate grade point average (GPA), and credential type (multiple- or single-subject). Past literature has shown these variables to be relevant to the experiences of preservice teachers in teacher education programs (Bullough and Knowles, 1990; Tschannen-Moran and Hoy, 2007; Brown, 2014). Preservice teachers of color (Brown, 2014) and older preservice teachers, for whom teaching may be a second career (Bullough and Knowles, 1990), often have distinctly different experiences in teacher education programs than their White or first-career peers. Similarly, experiences and beliefs about teaching may differ between multiple- and single-subject preservice teachers (Tschannen-Moran and Hoy, 2007).

#### **Data Analysis**

We conducted a zero-order Pearson's correlation analysis of relevant variables and then an ordinary least squares (OLS) regression. We looked at the contributions of each variable and then included them in models that included our demographic controls. Based on some of the results in our regression (described below) we also conducted a mediation analysis (Baron and Kenny, 1986).

Scholars have expressed potential concerns and offered improvements or alternative solutions to Baron and Kenny's (1986) oft-used mediation analysis (e.g., Iacobucci et al., 2007; Zhao et al., 2010). As such, we used the *medsem* command in Stata 15 (Mehmetoglu, 2018), which uses structural equation modeling (SEM) to conduct a mediation analysis that used the criteria set forth by Baron and Kenny, per the recommendation of Iacobucci et al. (2007). Additionally, the *medesem* command allowed us to conduct a mediation analysis using the methods elaborated on by Zhao et al. (2010). Specifically, they recommended a bootstrap test of the indirect effect as opposed to the regressions and Sobel's test recommended by Baron and Kenny (1986). In short, the *medsem* command allowed us to conduct our mediation analysis using an improved version of Baron and Kenny's (1986) mediation analysis using structural

TABLE 2 | Correlation of variables of interest.

	1	2	3	4	5
Life satisfaction	_				
2. Program sense of belonging	0.50***	-			
3. Trust	0.31*	0.42***	-		
4. Omnibus self-efficacy	0.29*	-0.05	-0.10	-	

<sup>\*</sup>p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

equation modeling (Iacobucci et al., 2007) as well as the methods promulgated by Zhao et al. (2010). We conducted bootstrapped SEM to address concerns related to using SEM with a small sample size (Ievers-Landis et al., 2011).

#### **RESULTS**

**Table 1** shows the descriptive data for our sample. Our sample was 76% women and 24% men. Forty-four percent of the sample identified as White, 24% identified as Asian, and 17% as Latinx. Preservice teachers who identified with more than one ethnoracial group made up 11% of the sample, while those who identified as Middle Eastern/Arab and Black each made up 2% of the population. Participants had a mean age of about 25 years (SD = 2.35) and an average undergraduate GPA of 3.41 (SD = 0.29) on a 0.0–4.0 scale. Preservice teachers in the multiple-subject cohort made up about two thirds of the sample (60%).

The average life satisfaction score was 4.90~(SD=1.69) out of a possible score of 9.0. The average of our independent variables ranged from the omnibus self-efficacy average of 6.12~(SD=0.96) to the average trust score of 6.53~(SD=1.46) (Recall that all variables were measured on a nine-point scale.)

# **Correlation and Ordinary Least Squares Regression**

**Table 2** shows zero order correlations for our variables of interest. Almost all of the variables had a moderate to weak correlation. The strongest correlation was between program sense of belonging and life satisfaction, while self-efficacy was not significantly correlated with sense of belonging or trust.

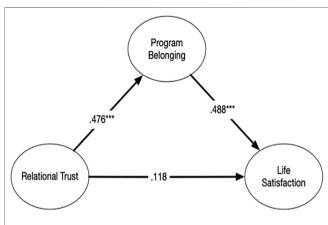
**Table 3** shows our regression models. The first three models were a simple regression between our independent variables of interest and life satisfaction. Model 4 includes all variables of interest, and Model 5 introduces our demographic control variables. In Models 1–3, all variables were significant and positively correlated with life satisfaction. In Model 1, program sense of belonging (b = 0.442, p < 0.001) accounted for 25% of the variance in life satisfaction ( $R^2 = 0.25$ ). Model 2 shows that relational trust (b = 0.356, p < 0.05) accounted for 10% of the variance of life satisfaction ( $R^2 = 0.10$ ), while self-efficacy (b = 0.509, p < 0.05) in Model 3 accounted for 8% of the variance in life satisfaction ( $R^2 = 0.08$ ).

In Model 4 we included the three variables of interest. Sense of belonging (b = 0.401, p < 0.001) remained significant and positively correlated with life satisfaction, as did self-efficacy

TABLE 3 | OLS regression preservice teachers' life satisfaction (N = 63).

	Model 1	Model 2	Model 3	Model 4	Model 5	β
Program sense of belonging	0.442***			0.401***	0.417**	0.485
	(0.098)			(0.101)	(0.120)	
Relational trust		0.356*		0.175	0.130	
		(0.140)		(0.132)	(0.153)	
Omnibus self-efficacy			0.509*	0.578**	0.497*	0.261
			(0.216)	(0.184)	(0.199)	
Demographic controls <sup>1</sup>					X	
Intercept	2.017**	2.573**	1.783	-2.397	3.065	
$R^2$	0.25	0.10	0.08	0.37	0.45	
AIC	229.69	241.45	242.30	222.89	229.79	
BIC	233.96	245.73	246.58	231.46	255.51	

<sup>1</sup>Demographic controls: Gender, racial-ethnic identity, Age, undergraduate GPA, Credential type: multiple-subject or single-subject Standard errors in parentheses. \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.



**FIGURE 1** | Mediation relationship between trust, program belonging, and life satisfaction. Standardized path coefficients are shown, \*\*\*p < 0.001.

(b = 0.578, p < 0.05). These three variables combined accounted for almost two fifths (37%) of the variance in life satisfaction ( $R^2 = 0.37$ ). Relational trust was no longer significant in Model 4 or in Model 5, which led us to believe that relational trust may have been mediated by one of the variables (We describe the results of our mediation analysis later in the section.)

In Model 5, the significance and direction of the three variables remained the same after controlling for demographic variables; our final model accounted for 45% of the variance in life satisfaction ( $R^2 = 0.45$ ). In this model, sense of belonging was the strongest predictor of SWB, as shown by the standardized coefficients in the final column of table. A one standard deviation increase in sense of belonging was related to an almost one-half standard deviation increase in SWB ( $\beta = 0.485$ ), while a one standard deviation increase in self-efficacy accounted for over a quarter of a standard deviation increase in SWB ( $\beta = 0.261$ ).

#### **Mediation Model**

In Models 4 and 5, the inclusion of our three variables of interest rendered trust insignificant, while it had been significant in a simple regression in Model 2. We looked at the possibility that sense of belonging had a mediating effect on life satisfaction. Due to our small sample, we conducted our SEM mediation analysis using a bootstrapping procedure with 1,500 samples (Iacobucci et al., 2007; Ievers-Landis et al., 2011) in conjunction with the *medsem* routine. Both the Baron and Kenny (1986) and Zhao et al. (2010) mediation analyses showed that the relationship between relational trust and life satisfaction was fully mediated by program belonging (see **Figure 1**). We found that relational trust positively predicted program belonging ( $\beta = 0.476$ , p < 0.001), and program belonging positively predicted life satisfaction ( $\beta = 0.488$ , p < 0.001). Lastly, we found that about 66% of the effect of trust on life satisfaction was mediated by program belonging.

## **DISCUSSION AND IMPLICATIONS**

Teacher well-being has received much attention in the literature (e.g., Split et al., 2011; Zee and Koomen, 2016), though the vast majority of studies in this area have focused on stress and burnout (e.g., Greenberg et al., 2016; Zee and Koomen, 2016). Several studies have focused on teachers' job satisfaction and/or commitment as a metric of well-being (e.g., Klassen and Chiu, 2010; Skaalvik and Skaalvik, 2014; Zee and Koomen, 2016); those focused on the well-being of preservice teachers and early career teachers have used this same lens (e.g., Chaplain, 2008; Hong, 2010; Kim et al., 2017). Few studies have explored teacher well-being—whether among preservice teachers or veteran or early career teachers—through the lens of SWB (e.g., Lent et al., 2011).

Research has made clear that feeling a sense of belonging to a community or group is positively related to SWB (Helliwell and Wang, 2011). While studies have linked trust to SWB (e.g., Bjørnskov, 2003; Helliwell and Putnam, 2007), these connections remain largely underexplored (Helliwell and Wang, 2011). And, despite the presence of studies that examine self-efficacy and SWB (e.g., Vecchio et al., 2007), a dearth of literature has explored the relationship between teacher self-efficacy and SWB. Likewise, there is absence of literature on SWB among preservice teachers more generally.

The current study adds to the literature by exploring the relationship between SWB and sense of belonging, trust, and self-efficacy in preservice teachers. In sum, our survey of 63 preservice teachers in two cohorts in one university, graduate-

level teacher education program found that sense of belonging, trust, and teaching self-efficacy all contributed significantly to participants' SWB. Sense of belonging to the program and self-efficacy were positively correlated in our final model, while trust contributed indirectly to SWB via sense of belonging. We discuss these results and their implications below.

## Hypothesis 1: For Preservice Teachers, Sense of Belonging to a Teacher Education Program Is Positively Related to SWB

We found strong support for our hypothesis that a reported sense of belonging was strongly related to SWB. Sense of belonging was the strongest predictor of SWB in our models and it mediated the relationship between relational trust and SWB. As noted, we defined sense of belonging as the feeling of being connected to or fitting in with a group or organization and feeling valued by that group (Hagerty et al., 1992; Mahar et al., 2013). The idea that this is related to well-being is not new: Scholars have contended that feeling a sense of belonging to a group makes people "feel distinctive and special, efficacious and successful" (Haslam et al., 2009, p. 3); some have argued that a sense of belonging is central to well-being (Haslam et al., 2009; Lambert et al., 2013). Our findings support prior larger-scale public opinion data in which sense of belonging to a community or a country was positively related to SWB (Helliwell and Putnam, 2007; Helliwell and Wang, 2011). Our findings also support studies of school belonging for high school students as well. Using data from the Program for International Assessment, for example, Huang (2020) found that school belonging was positively related to adolescent life satisfaction. In short, our findings align with SWB research in a variety of contexts.

A sense of belonging is integral to people's identity formation and maintenance of that identity (Brewer, 1991; Wenger, 1998; Guibernau, 2013). If preservice teachers feel like they fit and are valued by their teacher education program, they may, in turn, feel more like the teachers they want to become. In other words, because they are in their programs with the intent of becoming teachers, this validates an identity they are striving for. Earlier research has shown that feeling a sense of commonality or identifying with others in their cohorts relates to increased feelings of belonging among preservice teachers (Bjorklund and Daly, 2021). Additionally, Lent et al. (2011) found that teachers who are making progress toward professional goals report increased SWB. Sense of belonging to a teacher education program may function similarly for preservice teachers, as it may be a part of fulfilling professional aspirations. We contend, that the more preservice teachers feel valued and that they fit in with their program, the more they feel as if they are making meaningful progress toward their goal of becoming teachers.

Moreover, feelings of belonging to a group can foster a sense of competence and motivation (Portes, 1998; Levett-Jones and Lathlean, 2009; Bjorklund et al., 2020). If preservice teachers feel like they are more competent, efficacious, and more motivated, this may increase their SWB. Sense of belonging could also increase individuals' positive feelings about

themselves and their chosen path. Studies have shown that people with a more positive view of themselves tend to have increased SWB (Lyubomirsky et al., 2005). Additionally, feeling a sense of belonging gives people a place where they feel like they matter (Guibernau, 2013) and this feeling could increase feelings of SWB. This fact may explain, in part, the relationship we found with program sense of belonging and SWB.

Teacher education programs would do well to explore preservice teachers' feelings of belonging to their programs and to explicitly discuss and allow them to reflect on not only their own sense of belonging but also the benefits of feeling a sense of belonging to the school or the classroom for their students. By openly exploring belonging among preservice teachers, teacher education programs can potentially augment feelings of well-being and give preservice teachers tools to, in turn, create learning environments that foster belonging; when they enter the field, this will ultimately benefit their students (Gillies, 2017). Further, fostering a sense of belonging between preservice teachers and their peers and instructors can create a more open learning environment that allows for preservice teachers to take risks and to challenge themselves (Booker, 2016). Moreover, belonging can also increase participation and engagement in the program (Filstad et al., 2019). Teacher education programs should continue this work throughout the year, as belonging is not a final state, but an ongoing process (May, 2011).

As discussed above, despite the positive academic and psychological outcomes related to sense of belonging, there is a dearth of literature focusing on graduate school settings, especially teacher education programs (e.g., Bjorklund et al., 2020; Bjorklund and Daly, 2021). More work should therefore explore the antecedents and outcomes of sense of belonging for graduate students as well as its connection to well-being—for preservice teachers and for graduate students more broadly.

## Hypothesis 2: Relational Trust Between Preservice Teachers Is Positively Related to Preservice Teachers' SWB

Our findings partially support Hypothesis 2. In a simple regression, relational trust was significant and positively related to SWB, but in our full models the effect of relational trust on SWB was mediated by sense of belonging to the program: Relational trust increased sense of belonging; this, in turn, increased feelings of SWB. This adds to past literature showing that generalized trust and trust in work colleagues are both related to SWB (Bjørnskov, 2003; Helliwell and Wang, 2011). Relatedly, Kim and Kim (2013) found that positive peer relations among middle school and high school students are related to students' subjective well-being. And research has shown that trust among colleagues is strongly associated with well-being at work and that positive and trusting relationships in the workplace are related to a greater sense of belonging and stronger identity with that work (Chalofsky and Cavallaro, 2019).

Our findings can potentially be explained by the notion that relationships are integral to fostering a sense of belonging (Allen et al., 2018; Bjorklund, 2019). Put another way, at its root, sense of

belonging is relational (Allen, 2020; May 2011). As preservice teachers feel stronger relational trust with peers in their cohort, it follows that they may also feel an increased sense of belonging with that group. Moreover, identity verification is a core component of trusting relationships (Burke and Stets, 1999, 2009; Stets et al., 2018): When people's identities are verified or validated by peers, trust between them increases (Burke and Stets, 1999, 2009). For example, if a preservice teacher is sought out by a peer for a lesson plan, then that preservice teacher's identity as a teacher with quality lesson plans is verified, and trust between the two increases. Concomitantly, identity verification may increase sense of belonging with others (Burke and Stets, 1999). Increased relational trust may also be related to identity verification, which can increase sense of belonging to a group. And, if preservice teachers trust their peers, it is possible they will feel a joint sense of identity and a greater sense of belonging with those peers.

Relational trust is associated with a culture of sharing, communication, and collaboration between peers (Kramer, 1999; Dirks and Ferrin, 2001; Liou and Daly, 2014; Leana and Pil, 2017). Studies have shown that prosocial behaviors—such as helping others, cooperating, and feeling empathy—are positively related to SWB (Caprara and Steca, 2005; Helliwell and Wang, 2011). In trusting relationships, people are more willing to engage and cooperate with trusted others, which creates a positive environment that can augment general well-being (Kramer, 1999). It could be that increased relational trust creates the conditions for more collaboration, cooperation, and help-seeking and help-giving behavior, which creates the conditions that increase sense of belonging and SWB. Trust can serve as a social adhesive that connects people (Liou and Daly, 2014); as such, it is bound to foster greater sense of belonging, which fosters SWB.

Trust is a crucial part of human learning, and it is critical in all learning environments (Rotter, 1967; Edmonson, 2004; Hoy and Tschannen-Moran, 2007); it is created through repeated interactions over time (Rousseau et al., 1998). Thus, teacher education programs can take steps to increase relational trust between preservice teachers. Scaffolding opportunities for repeated interactions in safe learning environments, for example, can create conditions for trust to grow. Moreover, trust increases between people who face diverse challenges together (Tschannen-Moran, 2014b). Thus, the use of cohort models in teacher education programs—where preservice teachers take most if not all of their courses together as a cohort—can create environments that engender trust and belonging (Dinsmore and Wenger, 2006; Beachboard et al., 2011). This approach allows preservice teachers to have repeated interactions over time and to feel like they are facing the challenges of learning to teach together.

Additionally, teacher educators can take steps to facilitate trust. By articulating norms—and by holding people who violate those norms accountable, thereby creating an atmosphere of fairness—teacher educators can build trust with and between preservice teachers (Tschannen-Moran, 2014b; Resh and Sabbagh, 2014). Finally, it is worthwhile to keep in mind that trust is often reciprocated: By showing trust in preservice teachers, teacher educators may in turn gain their trust (Mitchell et al., 2018).

As Liou et al. (2017) stated, "despite ... positive outcomes of trust in education in general, empirical studies around preservice teacher preparation that focus on relational trust are rare" (p. 658). Additionally, Helliwell and Wang (2011) noted that the relationship between trust and SWB has been largely unexplored. The current study adds to the understanding of the relationship between trust and SWB, but future research should explore specific mechanisms that enhance trust between preservice teachers and strategies that teacher education programs can leverage to create trust among preservice teachers.

## Hypothesis 3: Teacher Self-Efficacy is Positively Related to SWB Among Preservice Teachers

Lastly, we found support for our hypothesis that preservice teachers' self-efficacy beliefs are positively related to SWB. In our final OLS model, self-efficacy was positively related to feelings of SWB. Our findings build on the work of Caprara et al. (2006b) and Caprara and Steca (2005), who found a positive (direct and indirect) relationship between social-emotional self-efficacy and SWB. Further, our findings support earlier findings that domain-specific self-efficacies (e.g., academic self-efficacy) are related to SWB in educational settings (Vecchio et al., 2007).

Though preservice teachers are technically students, they are students in a job training program. Ostensibly, by entering the program they have made the choice to become teachers. It is possible, then, that increased feelings of teacher self-efficacy are related to increased feelings of SWB, because preservice teachers feel like they are having success in their chosen endeavor. Lent et al. (2011) found that making progress toward professional goals is directly related to SWB in teachers; increased teacher self-efficacy among preservice teachers could therefore signify a belief that they are making positive progress in their professional goals. Likewise, Maass et al. (2016) found that self-esteem and sense of coherence in life are positively related to SWB. For preservice teachers, increased feelings of self-efficacy at the end of the teacher education program could contribute to both self-esteem and a sense of life coherence for preservice teachers; they have chosen to become teachers and they feel confident in their future ability to be teachers, and this could create a sense of life coherence and improve their self-esteem. Finally, increased self-efficacy could potentially indicate a more positive view of one's self, which Lyubomirsky et al. (2005) found to be related to SWB.

It is worthwhile for teacher education programs to build self-efficacy among preservice teachers, in particular because teachers' self-efficacy tends to decrease in the 1st year of teaching (Woolfolk Hoy and Burke Spero, 2005; Bokhove and Downey, 2018). Bandura (1997) articulated four primary sources of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and psychological and affective states. Programs can utilize this framework to design curricula and activities that help preservice teachers increase self-efficacy in the following ways:

- Mastery experiences tend to be the strongest source of selfefficacy (Bandura, 1997; Mulholland and Wallace, 2001).
  For teachers and preservice teachers, these are often found
  in the classroom, for example through successful lessons or
  positive connections with students. Thus, teacher education
  programs could focus on scaffolding experiences for
  preservice teachers to facilitate mastery experiences in
  their classrooms and in preservice teachers' placement
  classrooms.
- Vicarious experiences for preservice teachers can occur when
  they experience teaching successfully modeled by others.
  This can be especially powerful when one identifies with the
  person who is modeling. Programs may want to find ways to
  match preservice teachers with cooperative teachers so that
  they feel a sense of connection (We recognize that it is not
  always easy to find cooperating teachers, let alone those who
  connect with preservice teachers.)
- Verbal persuasion comes in the form of praise or feedback that supports teachers' actions, including support from peers (Hoy and Tschannen-Moran 2007). Preservice teachers who perceive higher levels of support also increase self-efficacy during their teacher education programs (Woolfolk Hoy and Burke Spero, 2005). It follows that a supportive and caring environment—where preservice teachers experience authentic and trusting relationships between faculty and peers, as well as a sense of belonging—could bolster self-efficacy (Bjorklund et al., 2020).
- People often read their physiological and affective states (e.g., increased heart rate) or moods during various situations to find cues about the situation and about how to act (Bandura, 1997). Teacher education programs can help build self-efficacy in preservice teachers by giving them opportunities to learn about emotional intelligence and teaching them to be aware of their emotions (Vesely et al., 2014). Emotional intelligence is the foundation for building teacher self-efficacy.

#### **Limitations and Future Research**

This study has several limitations. First and foremost, we drew from a small, cross-sectional sample. As noted above, we believe that this sample is representative of other post-graduate teacher education programs in the region in terms of demographics, course content, and mission. Thus, we believe our results have generalizability to programs similar in these regards. That said, they may not may not be representative of teacher education programs that differ in these aspects. Additionally, studies with "small sample sizes should always be viewed as preliminary" until more research can be done with larger samples (Ievers-Landers et al., 2011 p. 620). Accordingly, we view this work as a starting point for more research to explore SWB among preservice teachers. Additionally, exploring these or similar variables over time could give us a clearer picture about the relationships we identified.

Another weakness is that the Diener et al. (1985) life satisfaction scale is typically measured on a seven-point Likert scale, and we used a nine-point scale to create continuity for participants. As such, these results cannot be compared to other

populations from studies that have used this scale. That said, we do not believe that changing from a seven-to a nine-point scale altered our results in a meaningful way, as there is evidence that increasing the number of Likert scale items does not dramatically impact results (Leung, 2011).

Future research should explore SWB among preservice teachers as well as early career and veteran teachers-how do they compare, what are the antecedents and outcomes for each group, and a what accounts for the similarities and differences between them. We argue that by using SWB and similar constructs, researchers can take an asset-based approach to well-being, vs. a deficit approach focused on stress and burnout. Moreover, we believe that a better understanding of SWB for preservice teachers—beyond what this study offers—can give teacher educators and policymakers tools to improve the well-being of teachers in a time where many do not feel that their profession is valued by society (Burns and Darling-Hammond, 2014) and when many leave the profession in the first five years (Ingersoll et al., 2018). It may also be of interest to look at teacher education programs that utilize different strategies to build relationships and create cohesive cohorts, as this can further build SWB.

#### CONCLUSION

The benefits of SWB are manifold: SWB is related to improved health, better relationships, increased job performance, and stronger ability to cope with the ebbs and flows of life (Diener and Seligman, 2004; Lyubomirsky et al., 2005; Diener and Biswas-Diener, 2008; Diener and Chan, 2011; Erdogan et al., 2012). Despite its clear benefits, there is a dearth of research that explores the antecedents and outcomes of SWB among teachers. Teacher education programs and researchers alike should focus more attention on the SWB of educators, including preservice teachers, early career teachers, and veteran teachers.

McCallum and Price (2010) argued that "[p]romoting self-awareness of wellbeing in beginning teachers will contribute to their longevity and productivity" (p. 19). In keeping with this sentiment, we contend that teacher education programs would do well to purposefully and frequently explore the SWB of their preservice teachers. In particular, they should talk with preservice teachers openly about cultivating well-being and make them aware of research that shows not only its benefits but also its antecedents. It would not take much for teacher education programs to include relatively small activities and introduce various behaviors that have been shown to increase SWB (Lyubomirsky and Layous, 2013).

Contributing to the well-being of preservice teachers can add to their resilience, their success as teachers, and their longevity in the profession. Perhaps above all, increasing the SWB of preservice teachers is a laudable goal unto itself. The current study adds to the literature by showing relationships, direct and indirect, between preservice teachers' sense of belonging, trust, self-efficacy, and SWB. The relationships between these variables and SWB are well-established in the larger

SWB literature. That said, the value of this study is that it offers insights into how these variables interact in the specific context of a teacher education program as SWB in this context has been given scant attention. Given the difficulties and vulnerabilities associated with learning to teach, teacher education programs should look for ways to bolster learning environments that facilitate belonging, trust, and self-efficacy among their preservice teachers. Researchers should continue to explore ways to enhance the SWB of preservice teachers and the outcomes of SWB in these settings.

#### **DATA AVAILABILITY STATEMENT**

The datasets presented in this article are not readily available because "Sharing of the data outside our study was not authorized by IRB and the participants did not agree to have the data shared." Requests to access the datasets should be directed to pbjorklund@ucsd.edu

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#### **ETHICS STATEMENT**

The studies involving human participants were reviewed and approved by UC San Diego Human Research Protections Program. The patients/participants provided their written informed consent to participate in this study.

#### **AUTHOR CONTRIBUTIONS**

PB conceptualizing study, data collection, data analysis, drafting paper, editing paper MW drafting paper, editing paper AD drafting paper, editing paper.

#### SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/feduc.2021.639435/full#supplementary-material

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**Conflict of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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