On the measurement of preservice teacher commitment: Examining the relationship between four operational definitions and self-efficacy beliefs

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HIGHLIGHTS

- Self-efficacy was a significant predictor of the four measures of commitment.
- Responses to the measures did not differ between groups of preservice teachers.
- Regression pathways between self-efficacy and commitment differed between groups.
- Those intending to teach at the primary level showed weaker regression estimates.
- Multiple-item commitment measures showed strongest relationships with self-efficacy.

ARTICLE INFO

ABSTRACT

Using a sample of 287 preservice teachers from a large Midwestern university in the United States, this study examined the predictive relationships between four unique measures of commitment and a commonly used measure of teacher self-efficacy, as frequently employed in teacher commitment research. Differential response patterns and predictive relationships were examined with multiple-group structural equation models to compare results of decisions about instrumentation. Results suggest that while there were no differential response patterns to the instruments, the predictive relationships significantly differed as a function of group identification. Suggestions for measuring and interpreting the relationships shared with commitment are further discussed.

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1. Introduction

The commitment that drives teachers to enter and remain in the teaching profession has been a construct of great interest among teacher educators (Chesnut & Cullen, 2014; Klassen & Chiu, 2011; Schlechty & Vance, 1981). The literature is replete with examples of research on commitment for both preservice and inservice teachers (e.g., Betoret, 2009; Chesnut & Burley, 2015; Chesnut & Cullen, 2014; Coladarci, 1992; Evans & Tribble, 1986). While research on both preservice and inservice teacher commitment share common elements (e.g., social cognitive variables as

predictors), they differ in the way that commitment to teaching is measured. From the extant literature, studies on preservice teacher commitment to the profession tend to be based on a positive orientation to commitment (e.g., intention to enter the profession, intended years as a teacher); whereas, studies on inservice teacher commitment to the profession tend to be grounded in a negative orientation to commitment (e.g., emotional burnout, intentions to leave the profession, attrition). Given that quantitative investigations of commitment tend to rely on only one operational definition (e.g., psychological attachment, intentionality, burnout) per study, the lack of guidance in the field about which is most appropriate undermines research efforts and limits the types of conclusions that can be drawn from otherwise thorough investigations. As such, the impetus for the current study emerges from the inconsistent use of positively-oriented operational definitions commonly found in the quantitative investigations of preservice teacher commitment.

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Commitment is a complex, multifaceted construct. The decision to enter or remain in the teaching profession stems from beliefs about future self (Tabachnick, Miller, & Relyea, 2008; Wigfield & Eccles, 2000), beliefs about what can be successfully and competently performed (Bandura, 1977, 1997; Klassen & Chiu, 2010, 2011), the expectations that are held about the job (Buchanan, 2009; Chan, Lau, Nie, Lim, & Hogan, 2008; Inman & Marlow, 2004), the belief in its utility (Miller & Brickman, 2004), emotional awareness and resiliency (Brown, George-Curran, & Smith, 2003; Rots, Aelterman, Vlerick, & Vermeulen, 2007), and an accurate assessment of the cost to secure the job (Wigfield & Eccles, 2000). Commonly framed within the context of Bandura's (1986) social cognitive theory, research on preservice teacher commitment to teaching has provided the field with multiple theoretical predictors. The most commonly utilized predictor of commitment is self-efficacy.

1.1. Preservice teacher self-efficacy beliefs

Self-efficacy is the belief in one's ability to initiate and maintain the courses of action needed to produce an anticipated outcome (Bandura, 1977, 1997). For teachers, self-efficacy beliefs might manifest as the confidence to provide alternative instructional strategies for children from linguistically and culturally diverse backgrounds (e.g., Kelley, Siwatu, Tost, & Martinez, 2015), provide appropriate instructional adaptations for students with special needs (e.g., Lam, 2015), and engage in culturally responsive reinforcement and disciplinary schedules (e.g., Siwatu, Putnam, Starker, & Lewis, 2015). In the preservice and inservice teacher literature on self-efficacy beliefs, most studies focus on the influence of these beliefs on mental health outcomes (e.g., stress, anxiety, depression; Schwarzer & Hallum, 2008), burnout (e.g., Betoret, 2009; Skaalvik & Skaalvik, 2007), and intended longevity in the profession (e.g., commitment, years of service; Bruinsma & Jansen, 2010; Chesnut & Burley, 2015; Chesnut & Cullen, 2014; Klassen, Wilson, et al., 2012; Siwatu & Chesnut, 2014).

The malleability of confidence makes self-efficacy an optimal target for intervention in teacher education programs. Through everyday behaviors, individuals receive information about their performances and make attributions about their successes and failures (Bandura, 1977, 1986, 1997; Brown & Lent, 2006; Lent, Brown, & Hackett, 1994; Weiner, 1979). When individuals initiate and maintain a course of behaviors leading to a successful outcome, their self-efficacy beliefs are likely to be strengthened (Bandura, 1977, 1986, 1997). When met with failure, individuals are likely to reduce their expectations about what they can do successfully (Bandura, 1977, 1986, 1997). Likewise, individuals learn about their own abilities while watching comparable peers engage in behaviors of interest (i.e., observational learning; Bandura, 1986; 1997). Observing a comparable peer obtain success in an endeavor can boost one's confidence in his or her ability to be successful. Observing failure, on the other hand, can undermine one's beliefs in his or her abilities. While Bandura (1977, 1986, 1997) has identified two additional sources of self-efficacy information (e.g., persuasion, physiological arousal), these do not tend to maintain self-efficacy beliefs for extended periods of time nor are they frequently targeted in teacher education programs.

Individuals will experience successes and failures in any given domain. Accurate attributions regarding prior performances are likely to aid in calibrating expectations about what can be successfully accomplished in the future (Bandura, 1986, 1997; Schunk & Pajares, 2009; Usher & Pajares, 2008). While some researchers may highlight the need for accurate or slightly optimistic self-efficacy beliefs (e.g., Gonida & Leondari, 2011; Klassen, 2006; Schunk & Pajares, 2009), theories of human functioning rely on the assumption that individuals are aware of what they can and

cannot do successfully. Indeed, an adapted version of Bandura's social cognitive theory (1986), appropriately titled the social cognitive career theory, relies on the accuracy of self-efficacy appraisals when examining the development of career interest, performance in career-oriented tasks, and ultimate career choice (e.g., the commitment to enter or remain in a profession; Brown & Lent, 2006; Lent et al., 1994). In recent years, this adaptation has been used to better understand the decisions that preservice teachers make to enter and remain in the profession (e.g., Siwatu & Chesnut, 2014; Watt & Richardson, 2007; Zhang, Wang, Losinski, & Katsiyannis, 2014).

Self-efficacy, as a construct, has been given a key role in theories that describe the process through which career-related decisions are made (e.g., Bandura, 1997; Brown & Lent, 2006; Lent & Brown, 1996; Lent et al., 1994). Bandura (1997) states "people avoid activities and environments they believe exceed their capabilities, but they readily undertake activities and pick social environments they judge themselves capable of handling" (p. 161). Thus, the weight placed on self-efficacy beliefs should not be overlooked. By preparing teachers who are confident in their abilities to be successful in the various tasks associated with teaching, teacher education programs are helping individuals develop the fundamental self-beliefs necessary to enter the teaching profession.

1.2. Commitment to teaching

Commitment to teaching is a form of motivation (Rosenholtz, 1989). At the conceptual level, Schunk (2012) defines motivation as the process by which goal-oriented activities are initiated and maintained. While research in education has further specified this goal-oriented behavior into those which are extrinsically or intrinsically focused (e.g., Ryan & Deci, 2000), commitment to teaching is multifaceted in that it is influenced by both intrinsic (e.g., self-efficacy, utility) *and* extrinsic motivators (e.g., workload, salary, politics). The allure that measuring commitment brings to educational researchers is its recognized association with work performance, active engagement, increased academic rigor, and the development of healthy student − teacher relationships (Bogler & Somech, 2004; Day, Elliot, & Kington, 2005; Firestone, 1996; Gu & Day, 2007; Guskey, 2002; Jo, 2014; Rosenholtz, 1989).

Commitment to the teaching profession is strained whenever preservice teachers are required to reconcile what they believe they know about teaching with an accurate representation of the profession (Chesnut & Cullen, 2014; Kokkinos, Stavropoulos, & Davazoglou, 2016). While preservice teachers tend to remain predominantly altruistic in their motivations to teach (Manuel & Hughes, 2006; Sanger & Osguthorpe, 2011), they still experience cognitive dissonance when forced to confront the true nature of the profession (e.g., expectations about collegiality, workload, salary, autonomy; Pop & Turner, 2009; Ward, Pellet, & Perez, 2017; Young, 1995). The process of assimilating or accommodating new information or completely restructuring what is known about teaching is a part of the learning process (Dole & Sinatra, 1998; Limón, 2001). This process of reconciliation presents new challenges for preservice teachers and teacher education programs, as the resolution of these conflicts can ultimately end with an individual leaving the profession before graduating from the program (Galman, 2009). A strong commitment to the teaching profession, however, can offset the desire to quit for preservice teachers transitioning into the profession (Klassen & Chiu, 2011).

The operationalization of commitment in research focused on preservice teachers has historically followed a positive orientation (Chesnut & Burley, 2015). More specifically, when measuring preservice teacher commitment to the profession, researchers have relied on operational definitions that include longevity (e.g., years in