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Testing Bandura's Theory in school

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Abstract

This article seek the following 3 purposes: 1-The first was to test the validity of Sources of the Self-Efficacy Inventory (SOSI) among Iranian teachers Society, fulfilled in Study I. 2- The second was to evaluate the validity of the Teachers' Sense of Self-Efficacy Scale (TSES) among Iranian teachers Society, fulfilled in Study II. The third & the main purpose were to explore the impact of sources of teachers' self-efficacy on student's achievement. For achieving this aim, Study III suggests two alternative models, tested by Structural equation modeling technique. Study I and Study II (N=267) reported suitable validity for survey instrument. Findings of study III (N=284) indicated that between two suggested models the dependent model showed the best overall fit to the data. In this model teachers' self-efficacy had mediational role between sources of teachers' self-efficacy and student's achievement.

1. Introduction

Self-beliefs are a critical component of most modern theories of human motivation. Central construct in Albert Bandura's (1986, 1997) social cognitive theory is self-efficacy, which he defined as people's judgments of their capabilities to produce designated levels of performance. Self-efficacy differs from self-esteem and self-concept because it is task specific (Bandura, 1997; Hoy, 2004) and based on what people believe they are capable of doing in particular situation in the future (Hoy, 2004).

Self-efficacy theory, applied in the educational realm, has sparked a rich line of research into how teachers' self-efficacy beliefs are related to their actions and to the outcomes they achieve (Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). According to social cognitive theory, teachers who do not expect to be successful with certain students are likely put forth less effort in preparation and delivery of instruction, and to give up easily at the first sign of difficulty, even if they actually know of strategies that could assist these students if applied. However, Compelling evidence has been accumulating over the past three decades revealing that teachers' self-efficacy has been related to their behavior in the classroom and to student outcomes such as students' self-efficacy beliefs, motivation, and achievement (Anderson, Greene, & Loewen, 1988; Ashton & Webb, 1986; Midgley, Feldlaufer,& Eccles, 1989; Ross, 1992; Tschannen- Moran, Woolfolk Hoy, & Hoy, 2007). Bandura (1993) suggests that what teachers do and

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say in their classrooms is regulated and defined by the perception teachers have of themselves as individuals and of their personal and pedagogical abilities. He suggests that "Teachers' beliefs in their ability to motivate and promote learning affect the types of learning environments they create and the level of academic progress their students achieve".

Social cognitive theory provides some general guidance about possible sources of teachers' sense of efficacy. Bandura (1986, 1997) posited that self-efficacy beliefs are constructed based on four sources of efficacy information: Mastery experiences, Vicarious experiences, Verbal persuasion, and Physiological states(Tschannen-Moran, et al., 1998). Goddard (2001) explains "Efficacy beliefs are developed through individual cognitive processing that uniquely weighs the influence of efficacy shaping information obtained through mastery experience, vicarious experience, social persuasion, and affective states".

1.1. The Hypothesized Sources of Self-Efficacy

Mastery experiences: Mastery experiences are the most important sources of efficacy information according to Bandura. Efficacy beliefs are raised if a teacher perceives her or his teaching performance to be a success, which then contributes to the expectations that future performances will likely be proficient(Tschannen- Moran, et al., 2007). Bandura(1997) theorized that the most influential source of information comes from the interpreted results of past performance. These past performance accomplishments can create a strong sense of efficacy to accomplish similar tasks in the future. Alternatively, repeated failure can lower efficacy perceptions. Thus, teachers' Sense of Efficacy is affected by the positive or negative experiences.

Vicarious experiences: The second source of self-efficacy information is the vicarious experience gained by observing others performance tasks. By observing the successes and failures of others, people gather information that contributes to their judgments about their own capabilities. Modeling has the greatest influence when the models observed are perceived to be similar to the observer and in situations in which the observer has little personal experience.

Verbal Persuasion: This source of efficacy information is the least effective for the long term although it might be effective in the short term. And, "the potency of the persuasion depends on the credibility, trustworthiness, and expertise of the persuader (Bandura, 1997).Verbal persuasion has to do with verbal interactions that a teacher receives about his or her performance and prospects for success from important others in the teaching context, such as administrators, colleagues, parents, and members of the community at large.

Emotional/Physiological states: States or Emotional/Physiological states are also sources of efficacy information. Powerful emotional arousal, such as anxiety, can effectively alter individuals' beliefs about their capabilities. People may view a state of arousal as an energizing factor that can contribute to a successful performance, or they may view arousal as completely disabling.

Thus, teachers construct their self-efficacy beliefs through the interpretation and integration of information from these four sources. The strength of the contribution made by each source varies depending on the domain in question and on the cognitive processing strategies of the individual. The manner in which the multiple sources of information are weighted and combined influences the resulting self-efficacy.

2. Teacher Efficacy beliefs

Current understandings of teacher efficacy underscore the multidimensionality and specificity of these beliefs (see Tschannen-Moran et al., 1998). For example, the Tschannen-Moran and Woolfolk- Hoy (2001) measure of teacher efficacy (i.e. teacher sense of efficacy scale: TSES) identified three areas for which teachers may hold differing levels of efficacy: classroom management, instructional practices, and student engagement.

Bandura (1993, 1997) has been specific about how self-efficacy beliefs differ from other constructs in attempts to clarify conceptual and measurement issues particularly where related constructs are concerned (Dellinger, Bobbett, Olivier & Ellett, 2008). Self-efficacy is distinct from other conceptions of self, such as self- esteem and locus of control, in that it is specific to a particular task. "Self-esteem usually is considered to be a trait reflecting an individual's characteristic affective evaluation of self (e.g., feelings of self-worth or self-liking).By contrast, self-efficacy is a judgment about task capability that is not inherently evaluative" (Gist & Mitchell, 1992; Tschannen-Moran et al., 1998). Also in his latest book, Bandura (1997) clarifies the distinction between self-efficacy and