

PROMOTING SELF-EFFICACY OF PROSPECTIVE MUSIC TEACHERS: THEORETICAL INSIGHTS

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***Abstract.** Scientific literature shows that cultivating self-efficacy is conducive to learner in-depth study of music, independent choices and perseverance in the field of music. However, most current research studies focus on self-efficacy in primary and secondary education, whereas the self-efficacy of prospective music teachers has been scarcely investigated. Considering the importance of self-efficacy in music activities of prospective music teachers, a study on the particularity of prospective music teachers' self-efficacy has been initiated: the literature analysis method has been used, and a large number of literature sources related to self-efficacy and music education have been analysed. The following problem question is formulated: what is the particularity of self-efficacy in music education? The aim of this research is to analyse the concept of self-efficacy in music education. Research results show that self-efficacy determines the judgment of prospective music teachers on their learning, performance, and teaching abilities. Factors that affect the self-efficacy of prospective music teachers include mastery of experiences, vicarious experience, social persuasion, and emotional and psychological states.*

***Keywords:** music education, self-efficacy.*

Introduction

This study incorporates Albert Bandura's theoretical framework. A. Bandura refers to it as beliefs in individual's abilities to organize and conduct the courses of action necessary to attain the given goals (Bandura, 1977). Numerous research studies evidence that self-efficacy also performs a relevant role in education and musical activity, including the effect on setting learning goals, confidence in teaching assignments and academic performance in general (Zhang, 2016; Girgin, 2017; Ren, 2020; Guo, 2021).

Music education has its particularity and it influences people's thinking and behaviour in a subtle way. By stimulating learners' imagination and association, music education can enhance their interests, emotions, and other non-intellectual variables, fulfilling the goal of nurturing learners' inventive personalities. Considering the particularity of music education and the importance of self-efficacy, this article analyses the concepts of music education and self-efficacy and the sources of self-efficacy in music education based on a review of

previously published scientific sources. Four main factors that have influence on self-efficacy can be distinguished: mastery in experiences, vicarious experience, social persuasion, and emotional and psychological states.

The aim of the research: to analyse the concept of self-efficacy in music education.

Research method: literature analysis.

The Concept of Self-Efficacy

Self-efficacy is widely recognised as people’s views on their capabilities to perform at designated levels and has an impact on the events that affect their lives (Bandura, 1994). The theory of self-regulation claims that beliefs of an individual lead to action, which results in outcome expectations (Bandura, 2001). Initially it started as the Social Learning Theory (SLT) by Albert Bandura in the 1960s. Previous theories of learning, such as the one presented by Skinner (1971), argue that people’s behaviour is always controlled by the environment. Differently from Skinner (1971), A. Bandura argues that people are not simply reactors to external stimulation in their transactions with the environment (Bandura, 1978). They are active information processors and think about the relationship between their behaviour and its consequences. A. Bandura’s social cognitive theory provides a clear framework on which this investigation of self-efficacy is based (Bandura, 1986). In his theory, he suggests a model of reciprocal causation between cognition, behaviour, and environment, thought and behaviour being determined by the interaction of cognition, behaviour, and environment. Self-efficacy moderates the relationship between cognition and behaviour, which enables individuals to cognitively evaluate how well their abilities comply with the demands of the assignments (Figure 1).

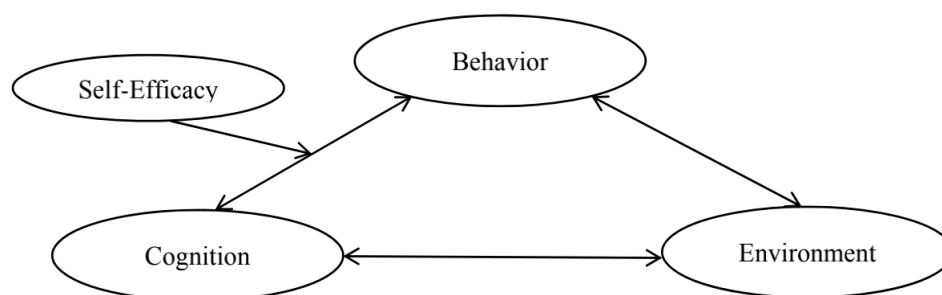


Figure 1 *Self-Efficacy in Bandura’s Model of Triadic Reciprocal Causation by Zelenak (2011)*

Malleability is a construct in self-efficacy that has attracted educators’ attention in particular (Berry & West, 1993). This characteristic of self-efficacy states that “it is dynamic and malleable, subject to changes in task demands,

situational determinants, social context, and individual development”. Even in a field, a person may have a range of different self-efficacy beliefs. For example, the self-efficacy of music performance in music activities is different from the self-efficacy of music learning and is more different from the self-efficacy of music teaching. A. Bandura states that “although efficacy beliefs have generalized functional value, how they are developed and structured, the ways in which they are exercised and the purposes to which they are put vary cross-culturally” (Bandura, 2002).

Self-efficacy is a theory of self-regulation in which an individual’s beliefs produce action that results in outcome expectations (Bandura, 2001). Self-efficacy beliefs also affect people’s emotional reactions and thinking styles. A. Bandura concludes that perceived efficacy can determine the pivotal choices people make a significant decision points in life. When coping with difficulties, individuals with low efficacy tend to give up, whereas those with high efficacy view challenges or obstacles as surmountable and prove to be possess resilience (Bandura, 2006).

Individuals with high self-efficacy beliefs can be more productive and more relaxed when faced with challenging assignments. Individuals with lower self-efficacy beliefs are more anxious because they perceive their assignments to be more challenging than they actually are, and healthier thinking also becomes more complicated. Thus, self-efficacy beliefs have a relevant influence on achievements of people (Seçkin & Başbay, 2013).

A strong sense of self-efficacy is one of the ways in which people change their own and social destiny. Self-efficacy beliefs have inestimable functions and value in controlling and regulating human behaviour. People with a high sense of efficiency adopt a future-oriented view of time when constructing life, full of confidence and hope for the future. Efficacy is also particularly important to studies and life of learners (Chen, 2009).

The second way to create and strengthen self-efficacy beliefs is through vicarious experiences provided by social models. There is a direct link between such experiences and perceiving social cognition processes such as empathy. Observing people who are similar to themselves succeed by invested effort raises the beliefs of observers that they themselves also have obtained the capabilities to complete comparable activities required to achieve success (Lockwood, 2016). Vicarious experiences are most impactful when the observer considers the person being observed to be relatable, such as a pre-service music teacher observing another trainee music teacher (Hendricks, 2016). Undergraduate observational experiences have been found to affect pre-service teacher beliefs, most notably when experiences are structured and pupils have the opportunity to exchange their findings with classmates (Prichard, 2017). Compared to other sources, secondary experience often exerts a limited influence on beliefs, and some research studies reveal that such experience negatively influences beliefs about

efficacy in learners who compared their play with that of other music performers (Moore, 2012; Zelenak, 2015). Since vicarious experience is based on inferences from social comparison, this source can be less reliable on and more prone to change in comparison to mastery experiences (Bandura, 1977). Therefore, vicarious experiences must be positive because negative social interactions lower self-efficacy levels in collegiate environments (Edwards, Hershberger, Russell, & Markert, 2001).

The fourth source of self-efficacy includes physiological and affective states. It refers to physical and emotional reactions affecting perceptions of personal competency, to reduce people's stress reactions and alter their negative emotional proclivities and misinterpretations of their physical states. Research indicates that numerous physiological states affect learner-teacher self-efficacy levels, including their characteristics, positive physiological states improve self-efficacy levels of teachers (Biasutti & Concina, 2018; Sander, 2020).

Numerous studies in educational psychology show that self-efficacy can significantly promote learner enthusiasm and self-confidence in learning participation (Chen, 2009; Mohammadyari, 2012; Guo, 2021) and improve learners' academic achievement (Yang, 2010; Honicke & Broadbent, 2016). Highly efficacious learners possess better time management skills, gain more enjoyment and pleasure from tasks, and use deeper cognitive processing (Vantieghem, Vermeersch, & Van Houtte, 2014). Research has shown that good self-efficacy beliefs are related to teacher behaviour, e.g., decreased burnout (Brouwers & Tomic, 2000), increased job satisfaction (Caprara, Barbaranelli, Borgogni, & Steca, 2003), and use of creative curriculum resources and innovative strategies in teaching (Wertheim & Leyser, 2002).

Self-efficacy is perceived as speculation and judgment that an individual makes about whether he has the ability to complete a certain behaviour, and it plays a major role when individuals complete their goals, tasks, and challenges, and is to determine their future status. It is "dynamic and malleable", which means that self-efficacy is different in various domains and it is affected by four factors, namely: mastery experiences; vicarious experiences; social persuasion; physical and emotional states. Mastery experience is perceived as the most important source out of all four discussed above.

Beliefs in self-efficacy determine how people feel, how they think, how they motivate themselves, and how they behave. Positive and high self-efficacy make people think they are competent for the work they undertake, so they will have a positive and aggressive attitude and affect academic performance.

Self-Efficacy in Music Education

Music provides many benefits for both children and adults alike. Children who participate in music show an increase in a sense of identity. Music also

increases children's self-esteem, especially those of low economic status. Young learners who choose to play instruments have a higher sense of identity and self-esteem compared to those who do not involve in music activities (Harland et al., 2000). Studies also show that in addition to the improved development of children's social skills, their personal skills such as confidence, self-discipline, a sense of achievement and physical coordination are strengthened through music instruction (Hallam & Prince, 2000). Furthermore, the study by Schellenberg (2006) shows that learners who engage in music learning have higher than average intelligence quotients (IQ) or tend to increase their previous IQ, further illustrating the benefits of music (Schellenberg, 2006). Similarly, adults who participate in music studies also demonstrate positive results. Research studies conclude that improvements are also identified in self-expression and self-improvement (Coffman, 2002; Costa-Giomi, 1999; Hallam & Prince, 2000; Harland et al., 2000). Adults involved in music also develop a sense of belonging and a way to meet new people. Some adult participants in music-related activities even obtain a love of learning and performing music (Coffman, 2002).

Music has the ability to develop both interpersonal and intrapersonal intelligences by exploring the self and collaborating (Gardner, 2006). Music is seen as a kind of pleasant art. People learn music, whether it is to acquire music knowledge and skills, music appreciation, or to participate in music performance and creation, psychological processes are very active. Music has a certain particularity of learning task; learning content, form, and use of sensory organs compared to other disciplines are totally different. There is a difference between artistic thinking and scientific thinking, when the former is recognised as known, rational, logical thinking, and the latter is referred to as aesthetic, and emotional image of thinking (Cao & He, 2002).

In education and specifically music education, we are generally more concerned with the outcome and not with the process of learning. We suggest many models of what we want learners to be able to perform, but too often deny them guidance for gaining a mastery level of performance. As music educators, we depend on the individual practice as a means of acquiring a mastery level of performance. In many aspects of education, those learners who can learn autonomously are successful in school (Leon-Guerrero, 2008).

Essentially, teacher education programmes must develop the abilities of those who want to teach music and the arts. Within the context of the self-efficacy construct, thoughts and feelings for arts education of a teacher will ultimately determine the quality of instruction that a learner of arts will get (Garvis, Twigg & Pendergast, 2010).

Music education has its specific features. Its education process depends on internal edification rather than on compulsion. People become willing to accept new things and environments, and aesthetic diversity will make their heart even more open (Wright & Kanellopoulos, 2010; Crawford, 2017; Johnson & Hawley,

2017; Zhu, 2020). Music education is not a kind of compulsive mental development education; it will not be obligatory for learners to set a specific thinking mode and moral standards (Qin, 2019; Vasil, 2019). Instead, they introduce subtle influence on people's thinking and behaviour (Sun, 2022). People are influenced and changed from deep inside and they carry out self-reflection and correction in the process of learning and appreciation (Krause et al., 2018, 2019; Wang, 2022).

Orejudo et al. (2021) state that the assignments music learners are asked to complete are mainly associated with performing in front of an audience either in concerts or during examinations. To achieve success, an individual must have acquired the technical skills that are necessary to prepare for and master the repertoire. However, in addition to necessitating the gradual obtaining of these skills, musical training also requires the development of motivational abilities that enable the individual to continue to do his or her job, especially when overcoming challenges.

In music education, several self-efficacy studies reveal the potential for understanding that informs behavioural change. Music teachers make complex decisions about the music they teach or perform. These decisions are predetermined by personal experience, observations of the environment around, beliefs regarding the nature of the particular task, and, importantly, beliefs about their own capability to complete that assignment. Teacher self-efficacy is perceived as a construct that interacts with teacher pedagogical practice (Alger, 2009). J. Vannatta-Hall shows how self-efficacy of pre-service music teachers has an impact on their choice of music teaching activities which then has a causal effect on their learners' music education. The study demonstrates the importance for them to develop the will (i.e., self-efficacy) and the skill (i.e., competence) to teach music if they are to enhance the competencies needed to provide their future learners with adequate music opportunities. Enhancing self-efficacy is the primary step in helping prospective music teachers acquire the right blend of skills, knowledge, and understanding that are of the utmost importance in teaching music (Vannatta-Hall, 2010). It is also stated that cultivating college learners' self-efficacy in music learning is significant in improving learners' academic achievement and lifelong development (Wei, 2010; Yang, 2010). Self-efficacy is an important psychological construct to take into account in the development and mentoring of music teachers (Regier, 2022).

M. Zhang and S. Han used music intervention and music teaching to explore the effect of music on the self-efficacy of college students. The results show that music education and music intervention have a significant impact on the self-efficacy of college students. Specifically, music education and music intervention could significantly improve self-efficacy of college students, and the duration of an intervention is directly proportional to the degree of improvement in self-efficacy (Zhang & Han, 2012).

Within the field of music pre-service training, Battersby and Cave (2014) advocate that music method courses address the beliefs and confidence (and hence self-efficacy) of trainee music teachers; a causal intervention initially found to be positive (Han & Culp, 2016). However, later findings show negative effect (Lowe, Lummis, & Morris, 2017), reflecting that successful behaviour interventions are not necessarily permanent.

Music has a profound impact on people's qualities and is an emotional art. It is quite easy to stimulate and mobilize emotions and personal achievement can be reflected well. Music education plays an important role in the development of people. It promotes the development of people's moral, intellectual, and aesthetic education. At the same time, music education has a certain particularity. It is not just a copy and imitation, but incorporates emotions such as the subject of performance and creation. Music education has the characteristics of subjectivity. On the one hand, music education must not only adapt to people's pursuit of truth, but also make people's emotions greatly satisfied in family ethics, interest understanding, ideal vision, and aesthetic experience.

Self-efficacy plays a significant role in music education. It is the evaluation of music learners' confidence in whether they can use their abilities or skills to complete the task of music learning, and it is a subjective judgment of individuals' ability to control their music learning behaviour and music learning performance. Self-efficacy in music learning provides learners with full confidence in learning music, can be more actively devoted to learning, have higher learning goals they set for themselves, actively use effective learning strategies and cognitive strategies, in the face of difficulty to put in more effort and time, so in the context of the music they have a positive attitude and emotions, less anxiety.

Conclusions

Self-efficacy is defined as the speculation and judgment of an individual about whether he or she has the ability to complete a certain behaviour. It plays a major role when individuals complete their goals, assignments, or have to deal with complicated situations.

The review of the scientific literature allows for pointing out four main sources of self-efficacy. The first source refers to the mastery of experience. The second includes the vicarious experiences of others and is seen as a type of social learning. The third source is social persuasion, which refers to receiving feedback from others. The last one includes the emotional and mental state.

The importance and particularity of music education make educators and learners continually seek improvement, persistence in practice, not giving up easily when encountering difficulties, full of confidence in performance, and timely self-adjustment when encountering mistakes. All of these require music educators to strengthen the cultivation of self-efficacy to achieve better goals.

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