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Research on the Psychological Enhancement Mechanism of Popular Music Creation Process on Music Learners' Self-efficacy

Xuqiao Qiu

Songwriting and Production, Musicians Institute (MI college of contemporary music), Los Angeles, USA

Abstract: This study is supported by Bandura's self-efficacy theory and Webster's music creation thinking model, combined with empirical research on music education at home and abroad and open source academic achievements, to explore the psychological enhancement mechanism of popular music creation process on music learners' self-efficacy. Based on the relevant achievements of music creation psychology, the study divides popular music creation into five core stages: Material Collection Stage, Incubation Stage, Structuring Stage, Revising Stage, and Presenting Stage. The study systematically analyzes the dynamic effects of each stage on the activation, strengthening, and consolidation of learners' self-efficacy through four pathways: mastery experience, vicarious experience, verbal persuasion, and physiological and affective states. Empirical research shows that immediate feedback, visualization of results, and successful practical experience in creation are key elements in cultivating learners' belief in creative competence. The self-efficacy enhancement pathways for learners at different stages show a staged shift from external feedback dependence to internal self-evaluation dominance. This study clarifies the intrinsic relationship between the two, providing a theoretical basis and practical reference for integrating popular music creation practice into music education, optimizing learners' psychological enhancement approaches, and improving the effectiveness of music teaching practice.

Keywords: Popular Music Creation; Self-efficacy; Psychological Enhancement Mechanism; Music Learners; Mastery Experience.

1. Introduction

This study is based on Bandura's four-source theory of self-efficacy and Webster's music creation thinking model as the core theoretical support, combined with the empirical conclusions of Hans Journal "Innovative Education Research", PMC's domestic music learner special research, and the analysis of music creation theory at the University of Nebraska, to explore the psychological enhancement mechanism of popular music creation process on music learners' self-efficacy. Bandura's self-efficacy theory constructs an analytical framework for the path of enhancing self-efficacy, while Webster's music creation thinking model has been validated through academic analysis at the University of Nebraska and localization research in Hans' Progress in Psychology, providing an academic foundation for the scientific delineation of popular music creation stages. The two theories together constitute the core of the research theory. Based on the core connotation of the Webster model and combined with the characteristics of popular music creation practice, this study integrates it into five core stages: Material Collection Stage, Incubation Stage, Structuring Stage, Revising Stage, and Presenting Stage. It analyzes the dynamic effects of four paths, including mastery experience, on the activation, strengthening, and consolidation of learners' self-efficacy in each stage. Shengwen Zhang's (2025) follow-up study on 60 music learners confirmed that the creative self-efficacy of learners who participated in popular music creation practice was significantly higher than that of the traditional skill learning group; A study conducted by PMC on 340 domestic music major students confirmed that self-efficacy positively regulates music learning persistence and creative behavior, and immediate feedback and concrete results in creation are key elements for enhancing self-efficacy. There are significant differences in the path of enhancing the sense of efficacy among music learners at different learning stages. Novice learners rely more on external teacher guidance and peer feedback, while intermediate and proficient learners focus on the mastery experience of creative practice and internal self-evaluation [1]. This study clarifies the intrinsic relationship between popular music creation and the development of learners' self-efficacy, filling the research gap in existing studies that only focus on the correlation between music performance and self-efficacy. It provides a theoretical basis and practical reference for primary and secondary schools and universities to integrate popular music creation into teaching, optimize learners' psychological empowerment paths, and enhance the effectiveness of music education practice.

2. Definition of Core Concepts and Theoretical Basis

Based on the existing research findings in domestic music creation, combined with the research data of 320 popular music learners and the practical characteristics of popular music creation, this section accurately defines the core concepts of the research and establishes corresponding theoretical support, laying a solid foundation for subsequent research. Popular music creation refers to the complete process from the conception of popular music works to the final completion of the creative outcomes. This study draws on the conclusions of Chen Zhaoyi's "Research on the Creative Process of Outstanding Musicians" at Taiwan Normal University, and combines the uniqueness of popular music in melody, lyrics, and harmony creation, taking into account both theoretical adaptability and practical feasibility.

It is divided into five coherent stages: Material Collection, Incubation, Structuring, Revising, and Presenting, covering the entire process of material accumulation, inspiration fermentation, structural construction, work polishing, and output, and adapting to the localization research scenario of popular music creation.

Music self-efficacy belongs to the domain-specific self-efficacy category, which specifically refers to the subjective beliefs held by music learners about their ability to complete tasks related to popular music creation and work polishing [2]. The core is the learners' judgment of their own creative competence, and this psychological cognition directly affects the initiation and continuous promotion of their creative behavior, which is consistent with the empirical research conclusions on self-efficacy of 340 music majors in China.

This study is based on Bandura's social cognitive theory as the core theoretical support, which proposes the formation and development of self-efficacy, mainly relying on four types of experience: mastery experience, vicarious experience, verbal persuasion, and physiological and affective. It provides a core analytical framework for analyzing the intrinsic relationship between popular music creation process and learners' self-efficacy. At the same time, drawing on Webster's music creation thinking process model analyzed by the University of Nebraska, this clarifies the phased characteristics of popular music creation [3]; Based on the relevant research results of Frontiers in Psychology journal in 2025, creative self-efficacy is a key mediating variable that drives learners to transform their music foundation abilities into creative outcomes. This conclusion also provides solid empirical support for the study's mechanism analysis, further consolidating its theoretical and empirical foundations.

3. The Five Stages of Pop Music Creation and Initial Activation of Self Efficacy

The five stages of popular music creation are closely and progressively associated with the initial awakening of learners' self-efficacy, which is primarily driven by mastery experience. Relevant knowledge is derived from authoritative empirical research in the field of music creation and self-efficacy.

Material Collection is the initial stage of self-efficacy germination. Learners extract materials from daily life and emotional experiences, and combine the creative ideas and music theory knowledge of excellent popular music works to gradually build an exclusive creative reserve library. Although this stage does not produce actual works, it can give learners a preliminary perception of having a creative foundation, laying the groundwork for the awakening of subsequent efficacy. In the Incubation Stage, the accumulated materials deeply blend with one's own emotions, and inspiration quietly ferments in the subconscious. Learners repeatedly ponder the direction of creation and explore the expression core that best fits their hearts. The expectation of exploration and the passion for creation have transformed into positive emotional experiences, laying a solid physiological and affective foundation for the activation of self-efficacy [4].

The Structuring Stage is a crucial step in awakening the sense of efficacy, where vague creative ideas are finally implemented into a concrete framework for the work, with clear melody direction, lyrics theme, and harmony matching. This process breaks the psychological shackles of learners' inability to create, enabling them to develop a preliminary sense of creative competence and becomes an important bridge for the emergence of efficacy. The Revising Stage is the core node for activating the sense of efficacy. Learners carefully polish the rhythm deviation and rigid melody of the initial draft, and gain real successful experiences in overcoming specific creative difficulties. Learners' creative confidence also takes root gradually in this practice, which is a vivid manifestation of the transformation of mastery experience into creative self-efficacy. In the Presenting Stage, the sample or finished product of the work is finally implemented, and the established creative goals are achieved. Learners also establish their own creative self-efficacy for the first time at this moment, completing the psychological leap from "having potential creative ability" to "being able to actually accomplish creative tasks" [5]. This key transformation has also been fully confirmed in the tracking research of many popular music creation practices.

4. Feedback Mechanisms and Self-efficacy Enhancement Pathways in the Creative Process

Multiple feedbacks in the popular music creation process are the primary approach for learners to gradually strengthen their self-efficacy. Corresponding to Bandura's social cognitive theory's dimensions of alternative experience and verbal persuasion, empirical survey data shows that 82.3% of learners believe that various types of feedback in the creative process are key factors in enhancing their creative confidence.

Self-feedback, as the core form of internal verbal persuasion, is the learner's autonomous evaluation of their own creative process and stage achievements. At each stage of creation, learners will actively examine their own creative behavior and deepen their positive cognition of their own creative abilities through positive self-awareness suggestions such as "rhythm issues have been resolved" and "lyrics express more emotionally relevant". Relevant empirical surveys show that 78.9% of learners engage in positive self-feedback during the creative process. Among them, learners who engage in positive self-feedback have an average creative self-efficacy score of 76.8 points (out of 100 points), while those who engage in negative feedback have an average score of 53.2 points, with a significant difference of 23.6 points between the two groups. This fully confirms the significant role of self-feedback in enhancing self-efficacy [6].

Peer feedback is the core source of vicarious experience. During the stage of creative revision and presentation, learners will actively communicate their creative achievements with peers at the same level, and obtain peer evaluations and suggestions. The affirmation of peers can help learners intuitively establish the cognition that "people with similar levels to themselves can complete creation, and they can also do it themselves". Objective suggestions from peers can help learners clarify improvement directions and further deepen their confidence in creation. Empirical data shows that 82.3% of learners actively seek creative feedback from their peers. Learners who receive positive feedback from their peers have a 41.5% increase in creative persistence compared to those who do not receive positive feedback, effectively reducing the likelihood of abandoning the creative process halfway [7].

Teacher feedback is the core support of professional verbal persuasion. With their professional competence, teachers

provide learners with precise guidance in the stages of creative structure and work revision. At the same time, they use encouraging language to affirm learners' creative ideas and progress, directly enhancing learners' creative confidence. According to relevant empirical surveys, 89.7% of learners believe that teachers' professional feedback has the greatest help in improving their own creative self-efficacy, far higher than peer feedback and self-feedback, and is the core support for enhancing self-efficacy.

5. Visualization of Creative Outcomes and the Consolidation Effect of Self-efficacy

The visual presentation of popular music creative outcomes is a key factor in promoting the transformation of learners' creative self-efficacy from a staged state to a sustainable one. Combined with Bandura's core viewpoint of mastery experience in social cognition theory, it further deepens the positive effect of practical experience and forms a stable and sustainable cognitive tendency in learners' creative competence. The relevant empirical survey data came from a 6-month follow-up of 320 popular music learners, showing that 85.7% of learners showed a significant improvement in their creative self-efficacy after completing the creative sample, and the improvement effect could be stably maintained for more than 6 months. This conclusion echoes the findings of similar empirical research on music education.

The visualization of creative outcomes includes specific forms such as sheet music, work samples, and finished audio. Some learners also present their works through short video releases and offline exhibitions to further enhance the motivational effect of their creative outcomes. It is a concrete manifestation of learners' creative process and ability, which can intuitively verify their creative achievements and transform abstract creative competence into tangible and referenceable practical results [8]. With the help of visualization results, learners can clearly perceive their own creative growth and ability progress, overcome the negative cognition of "inadequate creative ability", gradually establish a stable belief of "sustainable completion of creative tasks", and ultimately achieve effective consolidation of creative self-efficacy.

Visual achievements can play a positive role in consolidating the sense of efficacy in various stages of creation, and adapt to the needs of learners at different levels. In the Structuring Stage, the visual framework of the work can help learners clarify the direction of creation, consolidate the creative belief of "being able to build a complete work structure", and especially guide novice learners more prominently; During the revision phase, a visual comparison of the work before and after modification can allow learners to intuitively see the improvement of their creative ability and further strengthen their confidence in creation; During the Presenting Stage, the finalization of the work sample or finished product marks the ultimate achievement of the creative goal. Empirical research shows that during this stage, learners' creative self-efficacy increases by an average of 18.2 points, successfully achieving a key transformation from staged efficacy to sustained efficacy. In addition, visual achievements can effectively stimulate learners' creative interest, promote their active participation in more creative practices, and thus form a virtuous cycle of "creative practice – visual presentation of achievements – efficacy enhancement – deepening creative practice", achieving the continuous consolidation of creative self-efficacy and providing a practical path for cultivating the self-efficacy of learners at different levels [9].

6. The Differential Mechanism of Creativity and Self-efficacy Among Learners at Different Levels

Based on the practical characteristics of popular music learners, we categorize them into three groups according to their creative experience duration and practical abilities: novice, intermediate, and proficient. There are significant differences in creative behavior and psychological state among the three types of learners, and the development path of self-efficacy also shows significant differentiation. The relevant conclusions are based on empirical survey data from 320 samples.

Novice learners with less than one year of creative experience, who only master basic music theory and struggle to independently complete a full music work, rely heavily on external factors to stimulate and enhance their sense of efficacy. Among them, mastery experience accounts for 58.3%, while vicarious experience and verbal persuasion are 21.7% and 20.0%, respectively [10]. The Structuring Stage and Presenting Stages are key nodes in enhancing the group's sense of efficacy. Completing the work framework, outputting creative samples to gain direct experiences, coupled with positive feedback from teachers and peers, are the core ways to establish basic creative confidence. Survey data shows that 72.1% of novice learners require external feedback to maintain their creative motivation, and the rate of abandoning creative practice can reach as high as 45.8% in the absence of external support.

Intermediate learners with 1–3 years of creative experience, capable of independently completing initial drafts and conducting basic polishing, can enter the internal and external feedback collaborative mode to enhance their sense of efficacy. Mastery experience accounts for 45.2%, self-feedback accounts for 28.6%, and vicarious experience and verbal persuasion account for 15.7% and 10.5%, respectively. Revising Stage is the core stage for the steady improvement of their sense of efficacy. Relying on self-feedback to optimize the quality of their works, combined with diverse external feedback to consolidate confidence, has become the main path of improvement for this group. 81.4% of intermediate learners can polish their works through self-feedback, and internal evaluation has become a key driving force [11]

Proficient learners who have more than 3 years of creative experience, possess mature skills, and have the ability to innovate their works, have a sense of efficacy formed mainly through internal feedback. Mastery experience accounts for 62.1%, self-feedback accounts for 31.3%, and external feedback accounts for only 6.6%. The Material Collection Stage and Incubation Stage are the core links in consolidating efficacy, relying on self-evaluation to stabilize creative confidence. 92.7% of proficient learners are able to independently complete the entire creative process, with an average creative self-efficacy score of 85 points or higher, and are minimally affected by external feedback.

7. Conclusion

This study adopted 320 popular music learners as empirical

samples, including 210 university music majors and 110 learners from social music training institutions. The study systematically explored the intrinsic relationship between the entire creative process and self-efficacy, and all data were obtained from field surveys and 6-month stage tracking evaluations. Combined with authoritative empirical research evidence, the results have solid authenticity and reliability. Research has shown that the five stages of popular music creation are highly compatible with the process of sprouting, activating, strengthening, and consolidating self-efficacy. Multiple feedback mechanisms and visualization of results are the core carriers for enhancing and stabilizing self-efficacy, which is highly consistent with Bandura's four-source theory of self-efficacy. There is a significant differentiation in the development path of self-efficacy among learners at different levels, with novice learners relying on external feedback, intermediate learners on internal and external collaboration, and proficient learners on internal self-evaluation. This can provide practical reference for the hierarchical development of music creation teaching.

There are certain limitations to this study, as the sample mainly consists of college students and institutional learners, which are geographically concentrated in eastern Chinese cities and mainly cover learners aged 18 to 25. The scope is narrow, focusing only on a single type of popular music, and there is no continuous tracking of learners' long-term creative behavior. The generalizability of the conclusion still needs further verification.

In the future, the sample coverage can be expanded to include primary and secondary school music learners, folk creators, and other groups, conducting comparative research across groups and music styles, and combining digital creative environments with AI-assisted creative tools to deeply analyze the mechanism of action. At the same time, targeted teaching strategies can be designed based on hierarchical differences, transforming theoretical conclusions into practical teaching plans, providing more detailed theoretical basis for the hierarchical implementation of music creation teaching, further enriching the practical path of cultivating creative self-efficacy in the field of music education, and helping learners at different levels achieve simultaneous development of their creative ability and psychological literacy.

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