

FLOW EXPERIENCE AND SELF-REGULATION IN MUSICAL PRACTICE: AN EXPLORATORY/ DESCRIPTIVE STUDY

Rosane Cardoso de Araújo¹, Tatiane Wiese Mathias²

¹*Full professor, Arts Department, The Federal University of Paraná, Brazil* ²*Professor, the State University of Paraná (Unespar), Brazil*

Abstract

The aim of this study was to identify elements about the flow experience and self-regulation processes in the musical practice of an experienced flutist, relating data from both theories in an exploratory qualitative study. The methodology used was the in-depth interview. From the collected data, it was possible to observe the participant's self-regulatory processes and flow experience in her musical practice. In addition, elements belonging to the two theoretical foundations were observed. The main elements of relationship identified in the study of the two theories were: intrinsic motivation, concentration, autonomy and definition of goals and objectives.

Keywords

Recorder; Flow; Self-regulation, Musical Practice

Introduction

This article focuses on the relationship between two theoretical foundations of psychology, applied to musical practice: Mihalyi Csikszentmihalyi's Flow Theory and self-regulation studies from the perspective of Albert Bandura's Social Cognitive Theory. These theories have been used in different research areas of learning processes and motivation, including also the area of music, with a special focus on the field of music education and instrumental performance (see Austin, Renwick & McPherson, 2006; Leon-Guerrero, 2008; McPherson, Nielsen & Renwick, 2013; McPherson & Renwick, 2001; McPherson & Zimmerman, 2011; Nielsen, 2001; Araújo & Andrade, 2013; Custodero, 2005; Miksza, 2005; O'Neill & McPherson, 2002, Bacsal, 2016, Dias & Silveira, 2013, among others). Flow theory focuses on the study of the quality of the individual's engagement in performing a task. "Flow" is defined as an optimal state of great involvement in an activity, which requires a balance between the level of challenge and the subject's abilities to reach a goal, including a high degree of concentration Csikszentmihalyi (1990, 1996, 2014). Self-regulation, on the other hand, is understood as the use of mechanisms to direct the development of learning itself, based on the planning, monitoring and evaluation of one's actions (Bandura 1989, 1991, 2001, 2005, 2008). The aim of this article, therefore, was to identify elements about the flow experience and self-regulation processes in the practice of studying an expert flutist, relating data from the two theories from an exploratory qualitative study.

Theorical background

According to Csikszentmihalyi (1990, 1996, 2014) flow can be defined as a source of psychic energy that focuses attention and motivates action. The author developed this theory from interviews with people from different areas, who demonstrated a sense of satisfaction with their lives. Csikszentmihalyi indicated that people's deep engagement with the activities they performed gave them a sense of meaning and accomplishment. Thus, the expression "flow" was used to describe the sensation experienced in moments of great engagement in an activity, highlighted as great moments.

The "state of flow", according to Csikszentmihalyi (1990, 1996, 2014) is generated from affective components of motivation that guide the execution of an activity performed with great concentration and emotion.

For the author, flow occurs when the individual is fully involved, immersed in an activity that provides them with a challenge, at the limit of their control capabilities. From his studies, he listed several elements that accompany the flow state process: Clear goals/objectives; immediate feedback; balance between goals and challenges; concentration; inattention to personal problems; control of the situation; disappearance of self-awareness; altered sense of time and autotelic experience.

Self-regulation in learning, in the social cognitive perspective of Bandura (1989, 1991, 2001, 2005) is characterized as the individual's ability to organize their own learning, including cognitive strategies, motivation and making individuals become active in their learning process. Bandura divides the self-regulation process into three phases, exemplified as follows: (1) self-observation, which is the phase in which goals and strategy selection are outlined; (2) judgmental process, allows to qualify the performance, reviewing the adopted goals and strategies; and (3) self-response in which people draw conclusions about their achievements and assign self-rewards, self-corrections, punishments, valuing or disapproving of certain practices (Bandura, 2008).

It is important to highlight that even though the Flow Theory is related to positive psychology and selfregulation studies are part of cognitive social psychology, there is a concern in both theories with promoting the health and well-being of individuals. Bandura (2017) clarifies the practical importance of a theory, highlighting that the value of a psychological theory is evaluated both by its operational power to solve problems and by its potential to provide guides to effect personal and social changes.

Method

The present research was carried out through an exploratory qualitative study. The methodological design that guided this research was the in-depth interview. According to Duarte (2005), the in-depth interview is a flexible and dynamic interview technique that serves to apprehend data from a reality, using questions that serve to collect information both about the interior of the interviewee and to describe complex processes experienced by him. The research was carried out with a musician, a professional flutist (recorder), considered an expert. According to Ericssonn (2006) an expert is an individual who has achieved a high degree of improvement in relation to others.

To organize the interview script, some categories were considered a priori, such as: loss of sense of time, feelings experienced during the performance (elements of flow), study method, establishment of strategies, elements of self-regulation (self-observation, judgmental process and self-response), motivation, concentration, autonomy, motivation, setting goals and objectives. The interview was carried out on a remote model, in 2021, via a digital platform. The research was approved by the ethics committee of the Federal University of Paraná (Brazil) in 2020.

Results and discussion

The data obtained through this study are presented in a narrative format, highlighting the main indicators of the experience of the flow and of the self-regulatory processes observed through the data collected through the interview.

The research participant was 62 years old and had played the recorder since she was 13 years old. She took a degree in recorder at a university in Austria. At the time of the research, she was a professor of recorder, piano and theory/harmony at two institutions in Uruguay, in addition to giving private lessons.

Initially, she was asked about the musician's study practice. She explained that she notices that she often loses track of time in her recorder practice, explaining that time "goes by quickly" when she studies. According to Csikszentmihalyi (1990) a person in the flow is completely concentrated and loses track of time. In this situation, she has no space in her consciousness for any other information, as she keeps the focus only on the activity performed. Regarding the feelings experienced during the performance, the flutist described the feeling of well-being she feels when studying and especially after a concert. This well-being is indicative of the state of the flow, pointing out in the studies by Csikszentmihalyi (1990) by different people in the performance of the most diverse activities.

When analyzing her performance, the flutist highlighted that she seeks to evaluate her performance and check if there were deficiencies that should be improved for future concert experiences. This process, therefore, is a clear indication of the use of self-regulation in her practice, which makes her critical of her performance and active in the search for overcoming challenges and difficulties, highlighting the concept of human agency from Bandura's perspective (2001, 2005, 2008). The flutist also described her continuous search for the development of her performance skills: "No matter how much I study, I will always have a lot to study". This statement, therefore, indicates that she remains motivated to practice and has goals/goals that direct her attention and her daily musical practice process. Clear goals and objectives, therefore, are elements that accompany the flow experience (Csikszentmihalyi 2014, 1990) and also the self-regulatory processes (Bandura 2008). The expert flutist's motivation, on the other hand, remains an element that can be discussed as part of an autotelic personality, from the perspective of (Csikszentmihalyi, 1990) and the self-regulated learning of Bandura (1989), which also demands motivation for the process of learning management takes place.

2 | Flow Experience and Self-Regulation in Musical Practice: Rosane Cardoso De Araújo et al.

It was also observed in the content of the interview that the flutist and considers herself a good instrumentalist, having as strengths: "patience, persistence, curiosity and humility", but clarifies that in relation to musical/instrumental technique there is always a lot of work to be done, as it is something that can be constantly improved and developed. These data corroborate to highlight the flutist's confidence in her abilities as an instrumentalist. From the perspective of Social Cognitive Theory, this aspect can be analyzed as the presence of strong self-efficacy beliefs. According to Bandura (1997) self-efficacy beliefs can be defined as the individual's beliefs in their ability to organize and execute courses of action. The acquisition of self-efficacy beliefs is also related to self-regulation processes.

Specifically analyzing the flutist's musical study process and the strategies used by her, the participant said that she makes a diagnosis of the musical work to be worked on, defining the parts of the music, describing the difficulties encountered and trying to define the most effective means to solve the problem, visualizing the performance movements (mentally). The flutist also clarified other strategies used in her study, such as improvisation in the tonality of the work to be studied, the practice of scales and arpeggios. She demonstrated that she had a great deal of control over her entire study process:

As a student connected to an institution, I needed to maintain a very strict work plan. Today I have great flexibility. I came to the conclusion that studying well does not mean having many hours to practice the instrument. Most of the time I study mentally, anywhere (walking, on the bus, waiting in line...). When I pick up the instrument I have 70% of the work done. (Interview transcript)

In addition, the participant described making recordings of her performance, identifying what is good and what can still be done in another way. She also reported listening to different recordings of the same work and researching outside sources about the piece she is playing. From the data collected on the flutist's study process, it is possible to infer about the self-regulatory process existing in their daily musical practice, following the three phases of self-regulation indicated by Bandura (2008):

• *Self-observation:* This phase can be characterized in the interview speech when you report the organization of your study, using different strategies, such as practicing scales, arpeggios and technical exercises, recording your performance to analyze later. In addition, when you need to start studying a new piece and reflect on points to be worked on. According to Bandura (2008), the self- observation phase is related to monitoring and selective attention that allows providing the necessary information to carry out the activity.

• **Judgmental process:** second phase of self-regulation can be described from the interviewee's speech when observing her performance - from the recording of her performance, from the observation of the results of her study or after performing a concert - she identifies positive points and negative, it judges the achieved results, observes its performance and analyzes if it is a good instrumentalist, if it has good technique and if it performed a good interpretation of the work. Azzi et al (2021) explains that in the judgment or self-assessment phase, the individual perceives relevant aspects of their performance based on personal standards. The individual can assess their performance as meritorious or unsatisfactory

• *Self-response:* this phase can be seen in the interview at times when the flutist critically analyzes his performance and realizes what went right in his performance and should continue performing in future performances (such as the described study method) and also when he finds that something did not do well, identifying the reasons for the unsatisfactory performance. According to Bandura (2008), the self-response process can be positive or negative, in which people create incentives for their own actions, which are self-applicable, both rewards and punishments.

Finally, when analyzing the contents of the interview carried out with the flutist, some elements of the Flow Theory and the study of self-regulation from the perspective of the Social Cognitive Theory were related. The elements in commonality between the two theories that were identified in the study were: intrinsic motivation, concentration, autonomy and definition of goals and objectives. The flutist's motivation was verified when the participant revealed that she seeks to surpass herself with each new piece studied and that she never loses curiosity and interest in the practical challenges with the recorder. She also reported that the studied repertoire is an element that can interfere with motivation. Regarding concentration, it was possible to verify that the flutist is able to maintain a good concentration in her practice, losing track of time and focusing on the activity she must perform based on her self-regulatory processes. It was also possible to verify that the musician follows goals that guide her study and performance. Goals are fundamental elements in Flow Theory, as they direct attention and favor concentration. In self-regulatory processes, goals are components that guide the management of activities. When dealing with goals, the participant indicated that she always seeks in her study to achieve a clear, intelligible and sensitive musical discourse for her performance and that she seeks to achieve these goals through her daily study

process. Autonomy is another point of correlation sought between the flow experience and the self-regulatory process. In the present study, autonomy was verified by the way the flutist constructed her method of study, how she defines her objectives and by making decisions about the process of solving problems in performance. Autonomy is related to the intrinsic motivation process in the Flow Theory and to the autotelic personality, in which the individual continues in his activity for the pleasure of performing it (Csikszentmihalyi, 1990). In self-regulatory processes, autonomy concerns the concept of human agency, described by Bandura (1997, 2001, 2005) in the Social Cognitive Theory.

Conclusions

By bringing in this exploratory study data on the musical practice of an expert flutist, we sought to identify elements of the Flow Theory and elements of the musician's self-regulatory process, highlighting elements between the two theoretical constructs that can be related. Although they are studies/theories of different natures within the field of psychology, it is observed that both theoretical foundations include the view of human beings as proactive, who make decisions and make choices, driven by autonomous motivation. Therefore, it turns out that some elements are highlighted in the two references, such as the establishment of goals and objectives: in self-regulation, it allows the management of the activity with better results and in the flow process, the goals help the individual to focus on the activity and maintain order in the conscience. Concentration and autonomy are also part of the two processes and the development of skills occurs both through experiencing the flow experience and through self-regulation.

From the results reported in this research, we observed that self-regulation processes can lead to the experience of flow, in the sense of promoting better performance in musical practice and, consequently, an improvement in well-being and a sense of accomplishment and satisfaction with the activities. It was possible, therefore, to verify the presence of these processes in the musical practice of the interviewed expert flutist. It is expected that the results pointed out in this research highlight that it is possible to establish parallels between the Flow Theory and the self-regulation of learning, from the perspective of the Social Cognitive Theory, and that it can be highlighted that the knowledge of these theories can contribute to performers, teachers and students in the field of music act in a more reflective way about their musical practices.

Works Citation

- Araújo. R. C, & Andrade, M. (2013). A study on teenagers' musical practice and flow theory. *Musicworks Journal:* of the Australian Council of Orff Schulwerk, 18, 19-26.
- Austin, J., Renwick, J., & McPherson, G. (2006). Developing motivation. In G. McPherson (Ed.), *The child as musician: a handbook of musical development* (pp. 213-238). Oxford University Press.
- Azzi, R. G., Filho, R. A. C., Pedersen, S. A., & Maciel, A. C. M. (2021). Introdução à teoria social cognitiva. Artesã.
- Bacsal, R. M. G. (2016). Extending flow further: Narrative of a Filipino musician. *International Journal of Music Education*, 34 (4), 433-444.
- Bandura, A. (1989) Human agency in social cognitive theory. The American Psychologist, 44, 1175-1184.
- Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50, 248-287.
- Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman.
- Bandura, A. (2001) Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 50 (2), 248-287
- Bandura, A. (2005). Evolution of social cognitive theory. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management* (pp. 9-35). Oxford University Press.
- Bandura, A. (2008). O sistema do self no determinismo recíproco. In A. Bandura; R. G. Azzi, Roberta G & S. Polydoro (Eds.), *Teoria social cognitiva conceitos básicos*, (pp. 43-68). Artmed.
- Bandura, A. (2017). Teoria social cognitiva no contexto cultural. In A. Bandura & R. G. Azzi (Eds.), *Teoria social cognitiva, diversos enfoques* (pp.45-82). Mercado das Letras.
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper & Row.
- Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and invention. Harper Collins.
- Csikszentmihalyi, M. (2014) Applications of flow in human development and education. Springer.
- Custodero, L. A. (2005) Seeking challenge, finding skill: Flow experience and music education, Arts Education Policy Review, 103(3), 3-9.
- Diaz, F. M., & Silveira, J. M. (2013). Dimensions of flow in academic and social activities among summer music camp participants. *International Journal of Music Education*, 31(3), 310-320.
- Duarte, J. (2005). Entrevista em profundidade. In J. Duarte & A. Barros (Eds.), *Métodos e técnicas de pesquisa em comunicação* (pp. 62-83). Editora Atlas.
- Ericsson, K. (2006). The influence of experience and deliberate practice on the development of superior expert performance. In K. Ericsson, N. Charness, P. Feltovich, & R. Hoffman (Eds.), *The Cambridge handbook of expertise and expert performance* (pp.603-704). Cambridge University Press.
- Leon-Guerrero, A. (2008) Self-regulation strategies used by students musicians during music practice. *Music Education Research*, 10 (1), 91-106.
- McPherson, G. E., Nielsen, S. G., & Renwick, J. M. (2013). Self-Regulation interventions and the development of music expertise. In H. Bembenutty, T. J. Clearly, & A. Kitsantas (Eds.), *Applicattions of self-regulated learning across diverse disciplines: A tribute to Barry J. Zimmerman* (pp. 355-382). Information Age Publishing.
- McPherson, G. E., & Renwick, J. (2001). A longitudinal study of self-regulation in children's musical practice. *Music Education Research*, 3(2), 169-86.
- McPherson, G. E., & Zimmerman, B. J. (2011). Self-regulation of musical learning: A social cognitive perspective on developing performance skills. In R. Colwell, & P. Webster (Eds.), *Handbook of research on music learning* (pp. 130–175). Oxford University Press.
- Miksza, P. J. (2012). The development of a measure of self-regulated practice behavior for beginning and intermediate instrumental music students. *Journal of Research in Music Education*, 1(59) 321-338.
- Nielsen, S. G. (2001). Self-regulating learning strategies in instrumental music practice. *Music Education Research*, *3*(2), 155-167.
- O'Neill, S., & McPherson, G. E. Motivation. In R. Parncutt & G. E. McPherson (Eds.), *The science and psychology* of music performance: Creative strategies for teaching and learning (pp. 31-46). Oxford University Press.
- Nielsen, S. G. (2001). Self-regulating learning strategies in instrumental music practice. *Music Education Research*, *3*(2), 155-167.