## DESCRIPTION FOR THE GENERAL PUBLIC (IN ENGLISH)

## Practicing a musical instrument as a process of goal realization: The role of affect and implementation intentions

Playing a musical instrument, as one of the most advanced tasks for the human nervous system, requires active involvement, long-lasting effort, and commitment from the learner. Instrumental practice is an act of learning, often referred to as 'self-teaching', because musicians need to behave like their own teachers taking responsibility for the aims, musical contents, time allocation and strategies in their practice. A large number of studies have shown that practicing musical instruments leads to acquisition of expert musical skills, enhances intellectual and linguistic capacities, improves memory and social skills. However, not every instrumental student engages in practice and gains all these benefits. Many students are not persistent in their practice, and quickly give up from learning an instrument. Therefore, research is needed to discover the underlying causes of this problem. Explaining human behavior is a task for psychology, and making use of the knowledge from this discipline from theories and research could help recognize the mechanisms of instrumental practicing. Behind knowledge about mechanisms, we also need effective psychological interventions aimed at supporting students' instrumental practice. Therefore, we plan to investigate these kinds of interventions, designed on the basis of psychological knowledge.

In order to uncover psychological mechanisms of instrumental practice, we propose to understand practice as a process of goal realization. Goal realization requires that a person engages in subsequent tasks (or action phases): 1) forming goal intention, thus making a commitment to the goal, 2) forming implementation intentions, thus planning the goal realization, 3) acting on the chosen goal, and 4) evaluating the results of action. All these tasks are important in instrumental learning, and therefore investigating them in a coherent model will yield a better understanding of instrumental practice. We also propose that affect – the consciously accessible feelings evident in moods and emotions – can influence how people realize their goals. During goal realization, some problems might occur, e.g., problems in translating intentions into actions. These problems can be caused by a negative impact of some affective experiences (e.g., anxiety, boredom) on undertaking actions. Therefore, we propose to build accurate psychological interventions and check whether they help to regulate emotions and perform behavior. Such interventions can help instrumental students to engage in instrumental practice.

Three studies are planned to achieve the research objectives. First, in order to determine the current state of knowledge on the role of affect in instrumental practice, we intend to conduct a systematic review of the literature. Second, in order to uncover the relations between affect and instrumental practice, we will conduct a study allowing the development of psychometrically sound measures of practice-related psychological constructs. Using these measures, we will conduct a longitudinal study on piano students from randomly selected Polish music schools to estimate the relation between affect and instrumental practice. Third, to verify whether it is possible to effectively support students in undertaking instrumental practice, we will test the effectiveness of psychological interventions in a longitudinal experimental study. Piano students from music schools will take part in this study. This type of study will make it possible to determine the short and long-term effects of interventions.

Given the numerous advantages of instrumental practice, it is worth looking for the basic motivational mechanisms that explain engagement in such practice. So far it remains unclear, why some learners are not persistent in their practice, and how affect influence practice-related goals realization. We hope that pursuing this project will provide interesting answers to these questions and contribute to the development of the psychology of music. A better understanding of the mechanisms responsible for instrumental practice undertaking will make it possible to provide accurate psychological support for instrumental students in the future.