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A study on an arrangement system of an etude into an accompaniment of another musical piece to support motivation of music instrument practice

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It is generally difficult to play the violin. This study attempts to make the method which is to keep motivation of practice for violin learner. In practice of violin, Scale and Etude are necessary, although many violin learner stop to practice with these. The reason is that most of etudes are monotonic. Thus the method to be became able to practice with joy is required.

Up to now, many researchers reported to propose new practice methods for performer. However, these has some problem that apply to a few performer, didn't cover Scale and Etude. While I can find many researches that proposed automatic system for music arrangement. Nevertheless these also didn't cover factors of Scale and Etude.

This paper propose a system named Amuse étude, which arranges an etude into

an accompaniment of a musical piece such as a popular music that the learner likes to listen to it, and report system evaluation of this research. To keep harmony, this system recognizes a chord of a popular music, and make an accompaniment phrase which is tuned from this chord. Evaluation of this system divides to carry out three terms. First is an experiment to evaluate validity of the idea. In this term, 4 participants carried out comparative experiment in a circumstance of using this system and not using this system. Second, I did an evaluation experiment of developed application based on this system. This experiment lets 3 participants use the system application and I interviewed for them about the musical piece which made by this system. Finally, a violin expert evaluate this idea and system application. I illustrated this idea and application and questioned the expert about whether this system can support learner motivation or not.

The result of an experiment to evaluate validity of the idea shows that is possibility to keep the learners' motivation in practice comparing to the ordinary practice methods, although working hours which don't lead to improvement increase clearly. From an evaluation experiment of developed application based on this system, the sound made by this application is natural melody and it is good that this application allow to select many popular music dates. However, the study discover some problem, for example, an application which display music dedicated to use this application is necessary and even if one Etude is selected in this application, the generated music is similar to other. In an expert comments, although seems to be for people to do as a hobby is valid, this system has some problem that does not aim who is subject, the system means is not match with original means and listening subject is not clear that are better to listen PC sound or sound from own music instrument.

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