

Title	減算的な演奏補助で練習継続意欲を保つギター演奏習得補助システムに関する研究
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# **A Guitar Technique Tutoring System that Preserves Learner's Motivation of Practice by Applying Subtractive Assistance for Performance**

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There is dilemma that anyone who interested in playing the Guitar cannot play the guitar must go through the "practice" of guitar playing. I focused this dilemma, and I started to survey papers relating it.

At first, I could get information about “technologies of assistance for playing the musical instruments”. Recently, various assistance technologies for playing the musical instruments have been studied based on evolution of the musical instruments mechanism. Although they make beginners enable to get pleasure from playing guitar, the ordinary technologies could not adjust their assistance range to progress of learners' mastering technique. As a result, it was impossible for the learners to master guitar performance techniques in a step-by-step manner while they preserve motivation of practice by the assistance technologies. Hence, we propose a guitar technique tutoring system that is equipped with an adjustable performance assisting function. We constructed a prototype system and conducted a pilot user study. We asked two subjects to use the prototype system and investigated their motivation on guitar practice. The results suggested that the prototype system is effective for preserving their motivation and several points that should be improved were revealed. But subjects lost motivation

when training F chord. Then, I suggest assistance for F chord.

I experimented again, for checking about adjustable performance assisting function's effects on motivation, for the practice of playing the guitar. The experiment was taken for comparing two systems. A system is with adjustable performance assisting function, and another is without adjustable performance assisting function. These systems are used by 4 subjects, freely. The experimental results suggested that, the system with adjustable assistance is effective for motivation for practice the guitar.