

**Perception of Students, Assistant and Faculty on the Benefits of
Training From Senior Students (TFSS) in Students' Clinical Skills
Acquisition in Skills-lab Faculty of Medicine
Gadjah Mada University**

SUMMARY



Submitted by :

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**MASTER OF MEDICAL EDUCATION PROGRAM
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A THESIS SUMMARY

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INTRODUCTION

Peer-Assisted Learning (PAL) has been widely used in medical education. Studies on this area focused on the academic outcomes from students-learners and students-teacher (skills-lab assistants). It has shown that PAL had benefits in both students' academic performance not only in cognitive area but also in affective and psychomotor area of learning¹. A systematic review concluded that the impact of peer-teaching on objective learning outcomes of medical students appears to be equivalent to that of conventional faculty-led teaching in selected context¹.

In clinical skills learning, studies have shown that PAL had positive impacts on students' performance. PAL is as effective as faculty staff-led in clinical skills learning. PAL can support the acquisition of basic patient-centered interviewing skills², physical examination^{3,4} skills and also procedural skills training^{5,6}. PAL is as effective as faculty staff-led in clinical skills learning⁷.

Many benefits of peer tutoring have been described in the literature. Its success lies in the fact that peer-teachers and their students shared a similar knowledge base and learning experience, known as "cognitive congruence", which allowed the peer-teachers to use language that their learners understand and to explain concepts at an appropriate level. Furthermore, tutees recognized that since peers have recently gone through the same experience, they are better able to understand the tutee difficulties. Because of their similar social roles, this explained why student learners feel more at ease with a peer- or near-peer teacher. Peers may also be able to increase the students' enthusiasm for learning. Students may feel more comfortable discussing performance issues with peers than with faculty. This was known as "social congruence"^{8,9,1}.

Training From Senior Student (TFSS) is a PAL-scheme program in Skills Lab FM GMU. It has run for over 6 years. It is a senior student-led scheme that teaches clinical skills to junior students. The aim of this program is to facilitate students to practice their skills in order to skills acquisition¹⁰.

However, since the program implemented, failure rate in OSCE is still high and TFSS program has never been evaluated.

This study is a qualitative research design. The aim of this study is to explore students', skills-lab assistants' and faculty's perceptions on the benefits of TFSS in students' clinical skills acquisition. To explore problems in TFSS organizing and to encompass their suggestion for the future improvements.

METHODS

This study used exploratory focus group discussion (FGD) of 4 groups of year 3 students (2 tutors groups and 2 tutees; 8-10 students in each group) and in-depth interviews to 6 faculty staffs which were chosen purposively. Groups of tutees were divided in to group of tutee with higher score and passing rate of OSCE and lower score and passing rate of OSCE. FGD and interviews were conducted one times for each group or respondent and can repeated in order to get more explanations or confirmations when needed. The FGD and interviews were conducted using semi-structured open ended questions which were made before based on research questions and were adjusted according Creswell's interview protocol¹¹ and the local contexts purpose. The data collections were recorded using voice recorder and were stopped when there were no new information from respondents or the data has been saturated¹². The data were then transcribed and analyzed for themes using deductive content analysis¹³.

In deductive content analysis, it moves from the general to the specific. A deductive approach is based on an earlier theory or model and therefore is used when the structure of analysis is operationalized on the basis of previous knowledge and the purpose of the study is theory testing¹³. The respondents opinion on the role of PAL in skills acquisition were viewed from cognitive and metacognitive aspects of learning, social and motivational aspects of learning, organizational aspects of skills

training. Problems in organizing founded and suggestions for future improvements were also been explored.

RESULTS

Thirty-six respondents joined the study (30 medical students; 6 faculty staffs; respond rate 86%). The respondents' perceptions were viewed from 3 aspects; cognitive-metacognitive aspects, social-motivational aspects and organizational aspects of clinical skills learning. As a whole, the view of each respondent was not much different.

In general, respondents believed that TFSS had benefits for both assistants' and students' clinical skills learning. It was students' independent skills training program. It provided the opportunities for students to practice their skills but there were still many problems in organizing which limited their learning.

In cognitive aspects of learning, TFSS increased both assistants and students understanding on the cognitive aspects of the clinical skills subjects were trained. Feedback and discussions played important role in enhancing students' knowledge whereas recitation and verbal elaboration in assistants. Both preparing and presenting the subjects in TFSS session enhanced assistants' knowledge. They were more aware on the metacognition process in learning and also being motivated intrinsically than students.

TFSS also created comfortable and safe educational environment in skills training. Students were at ease and safe environment to ask or to try the skills even if there were wrong. Besides that, TFSS also promoted assistants' intrinsic motivation to study the subjects and practice their skills at the higher level of study.

In the organizational aspect, TFSS didn't provide the optimal chances and opportunities for students to practice their skills. Problems in TFSS organizing were found which influenced the students' opportunities. Problems aroused not only from students their self (i.e. lack of internal motivation from students) but also from the time and scheduling, facilities

and manikin availability, the number of assistants, problems in managerial, students workload and honoraria.

The program surviving and training from faculty (training on the special skills and how to give constructive feedback) were the positive parts of the TFSS program founded.

DISCUSSION

The results of this study indicate that TFSS had benefits in cognitive aspects of assistants and students clinical skills learning. This study confirmed the cognitive congruent concepts of PAL in participants' skills learning⁸. It also confirmed the goal oriented information processing and verbal elaboration theory in assistants' learning⁹. They get benefit not only in preparing PAL session but also when presenting the subjects and encounter with students in feedback and discussions session. This study also confirmed the metacognitive benefits of PAL scheme model in assistants in the context of clinical skills learning in undergraduate medical education.

This study also confirmed the benefits of PAL in social aspect of learning. It supported the social congruence concepts of PAL^{8, 9}. This study also confirmed the social psychological theory relating to assistants' learning that is role theory¹⁴. It also supported assistants' personal and professional development and Maslow's self-actualization theory¹⁴. In the motivational aspect of students learning, this study suggests that assistants develop intrinsic motivation better than participants. Self-determinations theory¹⁵ try to describe the reason. There is internalization and integration process in assistants to be motivated more intrinsically.

Problems founded in organizing need to be resolved and positive parts of the program need to be maintained and enhanced. Improvements in the participants' motivation should be done. TFSS session should be more interesting and varied. Problems in scheduling, managerial and in the TFSS format should be fixed shortly. Improvement in assessment program, integrate TFSS in formal curricula and the students' workload

need to be reexamined. Assistants' honoraria also need to be considered appropriately.

CONCLUSION

TFSS provided positive benefits on cognitive and metacognitive aspects of both assistants and students participant's clinical skills learning. TFSS also provides safe educational environment for clinical skills learning. TFSS also enhanced assistants' motivation to study the subjects intrinsically. But TFSS did not provide the optimal opportunity for students to practice the skills. Problems in TFSS organizing were found. Problems in organizing need to be resolved and positive parts of the program need to be maintained and enhanced. Improvements need to be done to enhance the quality and quantity of students' clinical skills training.

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