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Effectiveness of Practice Practical to Improve Student's Hands on Skills

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***Abstract:** As a student hands on skills are significantly important to become successful pofessional. Now days due to various reasons students shows least interest in practice practical. These practice practical are meant to encourage peer support learning. In our study we correlated number of practice practical and exam score for that particular topic. Statistical analysis shows increase exam score, signifying importance of practice practical. Thus with this study we will like to emphasis regular practice practical slots in students teaching timetable.*
***Keywords:** Practice, hands on skill, professional education, teaching timetable for professional courses.*

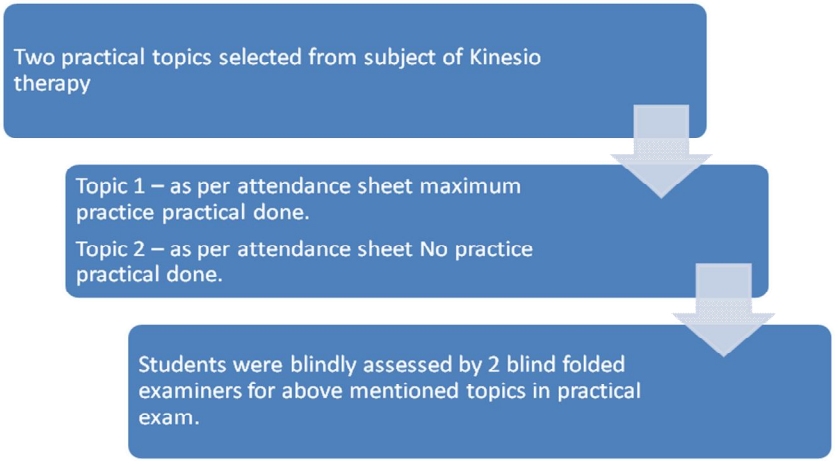
I. INTRODUCTION

Practice is must for achieving expertise in any field. K. Anders ericsson in 1993, coined term "deliberate practice" (dp).[(1)] according to ericsson skills are not natural or fixed but the result of lifelong deliberate, systematic and goal-oriented, practice of an activity .Thus the improved performance of an activity largely depends on how much time one spends actively practicing it. Research has showed that for skills of less complexity, repetitive practice plays important role.[(2)] practice helps even more for medium or highly-complex skills .[(3)] dp therefore appears to play a major role in the learning of skills.
When reviewed past research work, we found that Moulaert et al. studied a relationship between dp and the academic performance in medical students. They observed that the high-performing students were more likely to practice dp learning than the lower performers.[(4)] in 2011, Duvivier et al. Showed that students' OSCE results improved with the increasing use of dp methods.[(5)] Griswold and colleagues had confirm that the dp method also improves practical skills increasing patient safety consecutively.[(6)]
Thus in this study we tried to correlate number of practice practical taken for particular topic and improvements in student's exam score for that topic.

II. METHODOLOGY

Target population – Second year BPTh students of Lokmanya Medical College of Physiotherapy, Kharghar. (n=36)
Sampling was all inclusive. In our institute 36 students registerd in second year. First year students deliberately avoided as they are new for professional studies. Division of students in group was blindly done thus number is not same. And 10 student were absent for class test.

1) Group 1 –exam score for topic 1, i.e. well practice topic (n=12)
2) Group 2 - exam score for topic 2, i.e. without practice practical (n=14)



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Table 2.1: Descriptive Statics

Parameters	Group 1	Group 2
Mean marks	19.91	18.14
Standard deviation	4.10	3.50
Sample size	12	14

Data was compiled and statistical analysis was performed. We used effect size, as an effect size is a quantitative measure of the magnitude of a phenomenon.[7] Reporting effect sizes is considered good practice when presenting empirical research findings.[8,9] The reporting of effect sizes facilitates the interpretation of the real values, as opposed to the statistical, significance of a research result.[10]

For independent samples t – test, Cohen's d is determined by calculating the mean difference between two groups, and than dividing the result by pooled standard deviation. Cohen's d = 0.50, As per reference [11], it happens to be medium effect size. This means difference in score is significant between practice and non practice topic. In other words practice gives good score in practical exam by demonstration of perfect hands on skill.

III.DISCUSSION

During undergraduate physiotherapy education, knowledge, hands on skills, and attitudes have to be acquired by students to provide competent patient care after graduation. The term "skills" often comprises communication skills, physical examination skills, practical skills, psychomotor skills, clinical skills, technical skills and others without further specification.[12]

Hands on skills are an essential part of physiotherapist's treatments administration. However, physiotherapy graduates' performance of basic skills is often found to be below the expected level by teachers.

In our daily teaching schedule we have always observed that very few students give importance to practice practical. In this study we compared two topics with same group of students. Thus there is no difference in intelligence of both the groups. Topics selected were of same importance in syllabus with similar marking scheme thus bias for study is also minimised.

As per our findings, practise practical helps to improve score in practical exam. From review of literature following reasons can be chalked out

1) Practice practical gives real time feedback by peers to encourage skill development.

2) Feedback helps students to reflect upon their own actions, to recognize possible errors and to subjectively evaluate and observe their learning progress.[13]This feedback is act as a positive reinforcement for learning.

3) In Practice practical communication is relatively informal and in a particular empathic manner, which encourages learning.[14]

Thus this study encourages teachers to keep regular slots for practice practical in daily schedule which will definitely help students to sharpen their skills.

IV.CONCLUSION

Practice practical are effective measure to improve students hands on skill. Teaching schedule should emphasis on Practice practicals.

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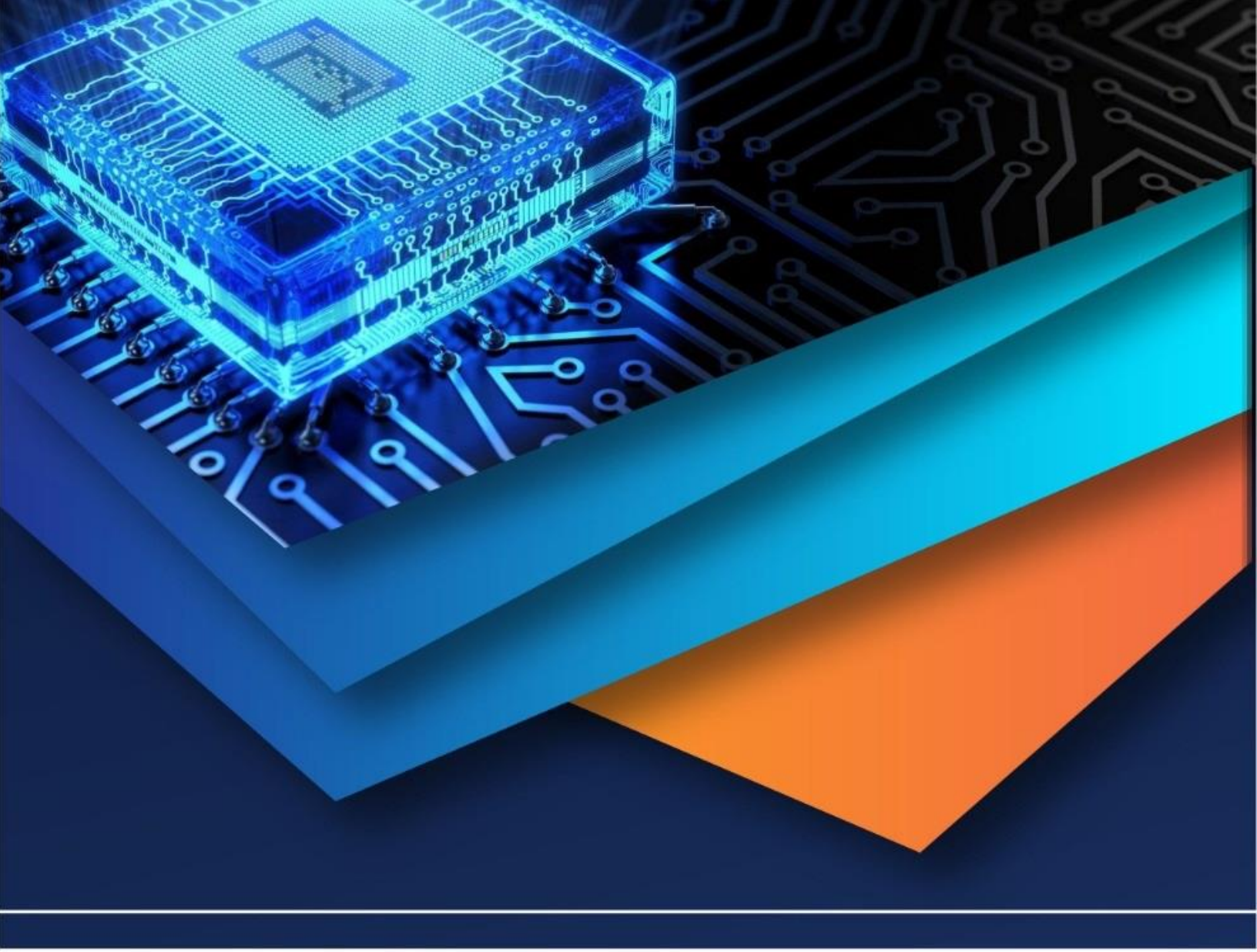
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