

Can the introduction of peer-led PBL into a Case Based Learning environment lead to an increase in intrinsic motivation to study?

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Introduction

Problem Based Learning is an instructional methodology shown to have beneficial effects on learning. It is based on the principles of constructivism where students learn with and from each other in small groups [1]. One of the key aspects that PBL is said to influence is intrinsic motivation. Several authors have called for more research investigating this effect [2,3]. PBL has been described as a "continuum of approaches" and has been utilised in curricula in various degrees [4]. However, there is little published evidence on the effects of PBL when integrated into a more traditional curriculum. This study explored whether the process of PBL can increase intrinsic motivation in first year medical students studying in such an environment with older medical students as facilitators.

Methods

Year 1 (n=14) medical students at KCLMS volunteered to participate in this short pilot study. PBL Trigger and feedback sessions were held in addition to core teaching. Two fourth year medical students with teaching experience volunteered to facilitate these sessions. Both groups were given handbooks and attended training workshops led by a member of faculty experienced in PBL. Focus groups, DREEM questionnaires (pre and post study) and self reported attendance questionnaires were used as outcome measures. Non-randomised control students (n=8) completed both DREEM questionnaires which enabled statistical comparisons.

"I'm so much more excited about medicine!"

Results

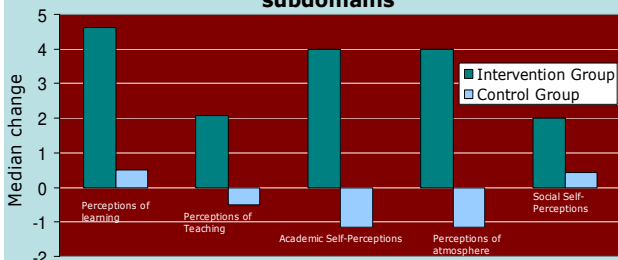
Qualitative: Focus groups

Using thematic analysis, 7 themes emerged:

Increased Motivation	Improved Learning
Safe Learning Environment	Effects on studying
Collaborative Learning	Negative Aspects
Peer Facilitation	

Quantitative: Dundee Ready Educational Environment Measure (DREEM)

Median changes in pre and post study DREEM subdomains



Discussion & Conclusion

Students were overwhelmingly positive about this 4 week intervention. They found that PBL made them more excited, enthusiastic and willing to learn. They recognised the benefits of small group learning and felt accountable and responsible for their own learning even though there was no expert input. This tied in with a generalised increase in DREEM scores across all domains with two obtaining statistical significance. These two domains i.e. perceptions of learning and social self-perceptions triangulated really well with the themes generated from the focus groups. Hence, this pilot study has shown that integrating PBL into a more traditional curriculum does drastically improve intrinsic motivation to study. It is hoped that this study will inform further research to investigate whether this holds true in different settings with a greater number of students.

References

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