

PBL-group functioning and students' perceptions of case quality

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Objectives

The aim of the study was to investigate the relationships between students' perceptions of PBL-group functioning and case quality. The aim was also to investigate the role of other factors (such as tutor performance and self-study) in PBL-tutorial sessions and causality between these factors.

Methodology

First-year medical and dental students of University of Helsinki (N = 133), forming 16 groups, completed an 18-item questionnaire on various aspects (group functioning, case quality, tutor performance, self-study). The questionnaire was used in all 16 groups after three different PBL-tutorial sessions.

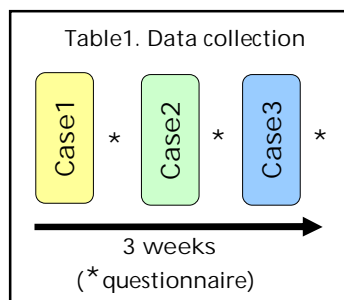


Table 2. Statements for group functioning (GF) and case quality (CQ) in the questionnaire:

- Scale: 1 (I disagree completely) - 5 (I agree completely)
- (GF) Group members showed interest in each other's thoughts
 - (GF) Group discussions helped reaching learning goals
 - (GF) Group work promoted learning
 - (CQ) The case was interesting
 - (CQ) Working with the case promoted learning
 - (CQ) The case encouraged self-study
- Scale: 1 (poor) - 5 (excellent)
- (GF) Group as a whole was
 - (CQ) The case was

Data analysis

Repeated measurements were carried out using the mixed model analysis. Tutor performance, self-study, group and sex were at first included into analysis, but since they had no significant effect ($p > .086$) on CQ, they were left out of the final analysis. The Pearson coefficient was used as correlation coefficient between the group means of group functioning and case quality.

Results

Table 3. Means, standard deviations and Pearson's correlation coefficients for/between group functioning and case quality

	GF		CQ		GF-CQ
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>r</i>
Case1	4.01	0.58	3.39	0.70	.488**
Case2	3.76	0.74	3.52	0.73	.474**
Case3	4.15	0.62	3.81	0.70	.562**

In line with earlier studies, group functioning in PBL-sessions correlated strongly with case quality. Mixed model analysis confirmed the connection between group functioning and case quality longitudinally: GF ($F = 77.7$, $df_1 = 1$, $df_2 = 380.1$, $p < .001$, $B = .461$).

Conclusions

- ❑ There is a strong connection between group functioning and case quality
- ❑ Our hypothesis is that CQ affects significantly GF, but well-functioning groups might also perceive the cases to be of higher quality than poorly functioning groups
- ❑ The quality of group discussion may also have a significant effect on how well students are able to make use of cases. This will be further analyzed based on the data
- ❑ In any case, attention should be paid to supporting the quality of group functioning and discussion
- ❑ Students' skills to contribute to group functioning should also be trained within the curriculum