

satisfaction between the groups. This finding might be explained because both interfaces corresponded to the expectations of the students.

In addition, this paper discussed some of the challenges involved in conducting 'real' life experiments on interfaces in an online environment. Some of these, such as students dropping of the courses and participants meeting in other face-to-face courses, do not have simple solutions. Others, such as technical problems should be carefully considered before the experiment starts. Furthermore, 'real' life experiment implies in less control over the variables. For this reason, the combination of qualitative and quantitative methods of analysis should be considered.

Other contribution of this paper was the development and gradual refinement of questionnaire items relating to a selection of social responses including feedback, group belonging, and visual awareness. The measurements evolved through the course of the research. Their development was greatly aided by the use of qualitative analysis on the first questionnaire from the first experiment. For example, the two indicators used in the first version of the social presence questionnaire (feedback from others and immediacy) were substituted in the second version (group belonging and visual awareness). This is because the meaning of social presence adopted in this paper is reflected better in these last two indicators. The final version of the questionnaire attempted to encapsulate the social presence perceived through the interface. In addition, items in the last version of the questionnaire were reworded, and text was substituted for the Likert-scale numbering, facilitating better comprehension of the scale. Therefore the final version of the social presence questionnaire is short and composed of clear and concise items.

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12. References

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