



#### **Evaluating students' awareness of their group work capabilities in physiology laboratory classes**

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Group work is a vital part of university education as it fosters collaboration and teamwork skills, preparing students for the workforce (Gatfield, 1999). In physiology, students often have opportunities to undertake group work within laboratory classes, where students may work in self-selected or prescribed groups, and often complete associated assessment tasks either as individuals or as a group. Students learning in small groups have higher achievement and more positive views about group work, than students working individually (Almond, 2009). However, student self-efficacy in group work is variable, with potential impacts on group cohesion and success (Black et al, 2019). This study aimed to evaluate students' perceptions of their own strengths and weaknesses when engaging with peers in shared learning environments.

Participants were consenting second year biomedical science students (n=446) undertaking a 'Systems Physiology' course in Semester 2, 2022. Most were enrolled in the Bachelor of Biomedical Science (n=194) or Science (n=119) programs. Theoretical content is delivered via face-to-face interactive lectures assessed in two online quizzes and an end-of-semester examination. The course also incorporated a series of six inquiry-based practical classes (Colthorpe et al, 2017), in which students worked in the same small groups. For practical assessment, each group of students worked together to produce an annotated bibliography and to design and present an experiment proposal. In subsequent classes, students undertook their experiment and analysed the data. All students then completed an individual laboratory report based on that experiment and its analysis.

Students were asked an open-ended question "*Identify your own strengths and weaknesses when it comes to engaging with your peers in shared learning environments (e.g. group work).*" Responses were subjected to an inductive thematic analysis and theme frequency quantified. Students frequently reported their strengths as interpersonal skills, such as open-mindedness and valuing of others' opinions, and their ability to communicate effectively. For example: "*My strengths in group work include flexibility, open communication and interest in other's opinions during discussions*". Students commonly identified difficulty engaging with others as a weakness, often describing a lack of self-confidence as a contributing factor. Others identified that they had a lack of flexibility in their time availability. Some students expressed difficulty in trusting the quality of work or commitment by their group members, identifying this as a weakness within themselves. These findings suggest that students do have considerable self-awareness regarding their capabilities in undertaking group work and insight into how this may impact on their success.

#### REFERENCES

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