

# Impact of Self-Efficacy, Stress and Anxiety on Students' Perception of Group Work

Author: Stephen Fahim - Supervisor: Prakashini Banka - Department of Psychology - Dublin Business School



## ABSTRACT

The aim of the study was to evaluate students' perceptions of group work, and determine the impact of mental health factors. Participants completed an online survey and 72.9% preferred individual vs group assessment. Analysis showed no significant difference in mental health factors between these groups. The nature of the main themes in the thematic analysis, however, calls in to question the true effectiveness of group work.



## INTRODUCTION

Student mental health is a growing concern and topic of study (DordiNejad et al, 2011). Group assessments are also an increasingly used tool among universities (Elliott & Higgins 2005). This study aimed to examine students' perception of group work, and to determine what effect some of the typical mental health issues faced by university students have on their perception of group work.



### Self-Efficacy

The belief in one's ability plays a significant role in their decision making and approach to challenges. (Schwarzer & Luszczynska, 2005). Research has also shown that self-efficacy plays a key role and is a strong predictor of students' motivation and learning (Zimmerman, 2000; Dinther et al, 2011).



### Anxiety

Studies have investigated the effects of anxiety on students and the results have consistently found that higher levels of anxiety are associated with lower levels of academic performance, learning ability and time management (Locken & Norberg, 2005; Sansgiry & Sail, 2006; Chinn, 2009; DordiNejad et al, 2011).



### Stress

Misra & McKean (2000) noted a "disturbing trend in college student health" due to excess stress. Students undergoing "exam-stress" demonstrate impaired performance on tasks, report significant increases of perceived stress, emotional distress, and a host of other negative effects (Oaten & Cheng, 2005).



### Group Work

Group tasks are an increasingly popular assessment method (Elliott & Higgins 2005), yet there are problems associated with this such as social loafing. This is particularly relevant to and prevalent in cooperative classroom tasks (North et al, 2000).

It was hypothesised that there would be a significant difference in levels of self-efficacy, stress and anxiety between those who preferred individual or group assessment. Perceptions of group work are also examined using open ended questions on the benefits and downfalls of group work



## METHOD

**Participants** – A purposive sample of 59 Irish university students were recruited in person and online via email, WhatsApp, and Facebook as well as online student forums.

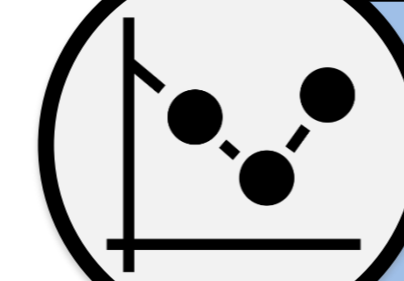


**Design** - Study was of mixed design using cross-sectional data with a qualitative element. The independent variable was work type preference (Individual vs Group), the dependant variables were stress, anxiety and self-efficacy.

**Materials** – Survey using Google forms software and consisting of a questionnaire used by Bentley & Warwick (2013), the CSE and the shortened DASS-21 scale.



**Procedure** - Participants were invited to take part in an online study. They were briefed on the nature of the study and informed that it was completely voluntary and confidential. After giving consent, they completed the survey and Participants were thanked for their time. Any necessary support services were offered.



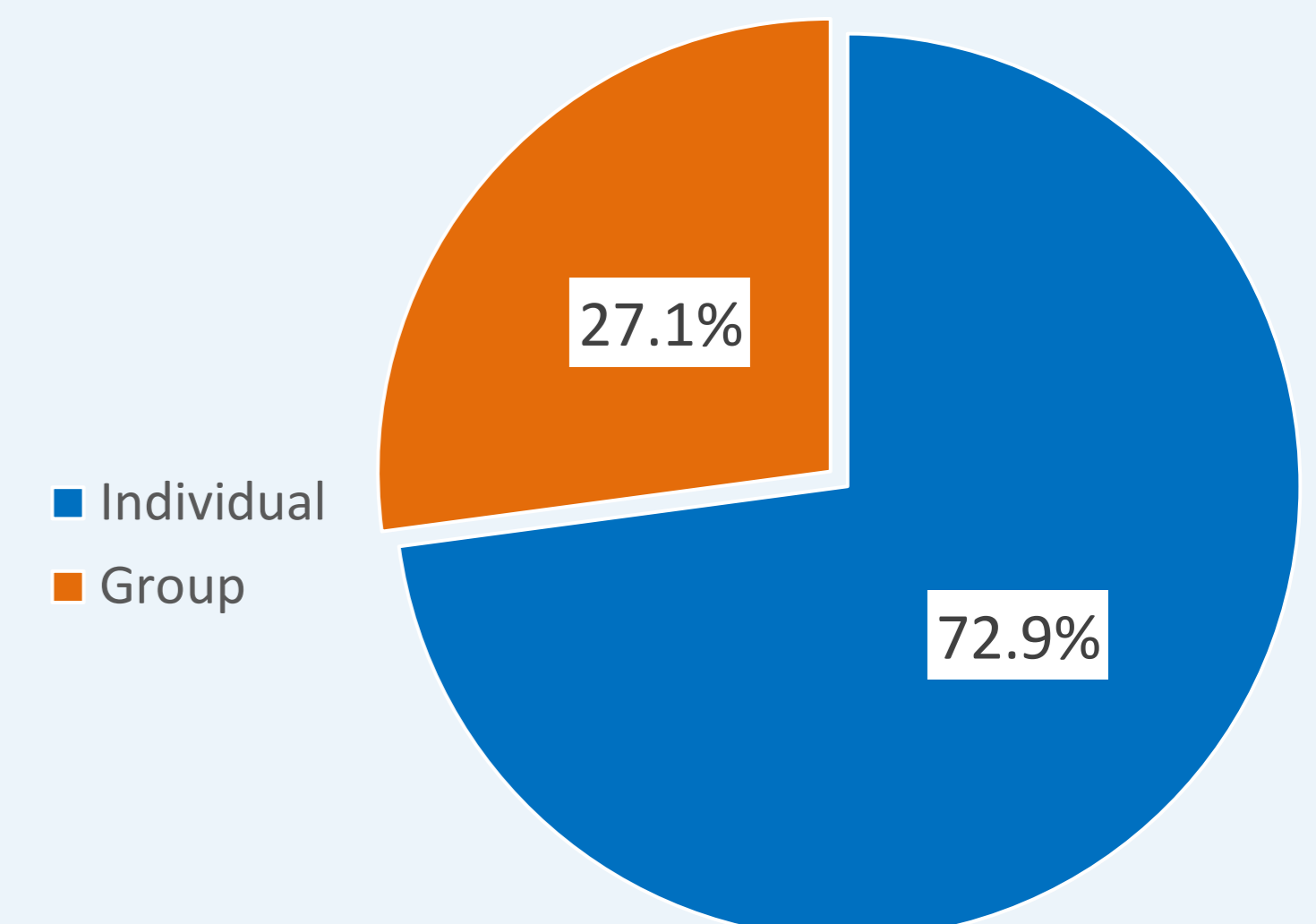
## RESULTS



### Quantitative

Majority of students preferred individual (N=43, 72.9%) vs group assessment (N=16, 27.1%). Independent samples t-tests and a one-way multivariate analysis of variance (ANOVA) found no significant differences in levels of stress, anxiety and self-efficacy between groups.

Assignment Type Preference



### Qualitative

Thematic analysis, as per the method outlined by Braun & Clarke (2006), found three main themes for the questions "What do you feel is the biggest benefit of working on group assignments?" and "What do you feel is the biggest drawback of working on group assignments?".

**Benefits** - The benefits of group work had three main themes; *Learning, Productivity* and *Social Aspects*. Some examples of responses in these themes are presented below.

"Learn to work with others, to use skills in different ways than when working alone."  
(Participant 27)

"Create a project work that you would not be able to complete alone in the given time frame."  
(Participant 34)

"...you can get help and support if you are struggling with the topic."  
(Participant 3)

**Drawbacks** - The themes for the drawbacks of group work were *Individual Differences, Resource Management* and *Social Dynamics*. Typical responses in these themes are presented below.

"... it's a very unfair way to do weighted assessments where everyone gets equal credit for unequal work."  
(Participant 40)

"It is difficult to get people to do the work and conduct meetings to discuss the work."  
(Participant 2)

"Some people are more assertive and can take over."  
(Participant 22)



## DISCUSSION

**Findings & Implications** – Majority of participants prefer individual assessment, however the study still supports the continued usage of group projects as an assessment tool. Themes demonstrate that students value group work, yet inverse relationship of main themes suggest more research is needed to determine the true effectiveness of group assessment.

**Limitations & Further Research** – Difficult to generalise findings due to subjective nature and participant sample may have been unrepresentative. Modifying the methodology and conducting additional longitudinal studies comparing individual vs group assessment scores may provide more of an insight in to the effectiveness of group work.



## REFERENCES

- Chinn, S. (2009). Mathematics anxiety in secondary students in England. *Dyslexia*, 15(1), 61-68.
- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *Jama*, 298(14), 1685-1687.
- Dinther, M., Dochy, F., & Segers, M. (2011). Factors affecting students' self-efficacy in higher education. *Educational research review*, 6(2), 95-108.
- DordiNejad, F. G., Hakimi, H., Ashouri, M., Dehghani, M., Zeinali, Z., Daghighi, M. S., & Bahrami, N. (2011). On the relationship between test anxiety and academic performance. *Procedia-Social and Behavioral Sciences*, 15, 3774-3778.
- Elliott, N., & Higgins, A. (2005). Self and peer assessment—does it make a difference to student group work?. *Nurse Education in Practice*, 5(1), 40-48.
- Locken, T., & Norberg, H. (2005). Reduced anxiety improves learning ability of nursing students through utilization of mentoring triads. *J Nurs Educ*, 48(1), 17-23.
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41.
- North, A. C., Linley, P. A., & Hargreaves, D. J. (2000). Social loafing in a co-operative classroom task. *Educational Psychology*, 20(4), 389-392.
- Oaten, M., & Cheng, K. (2005). Academic examination stress impairs self-control. *Journal of social and clinical psychology*, 24(2), 254.
- Sansgiry, S. S., & Sail, K. (2006). Effect of students' perceptions of course load on test anxiety. *American Journal of Pharmaceutical Education*, 70(2), 26.
- Schwarzer, R. A. L. F., & Luszczynska, A. (2005). Social cognitive theory. *Predicting health behaviour*, 2, 127-169.
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, 25(1), 82-91.