



# Predictors of student agency: the relationship between student agency, learning support and learning experiences in an interprofessional health science faculty.

Authors: Simone Titus<sup>1</sup>, Nicolette V Roman<sup>2</sup>

<sup>1</sup>Interprofessional Education Unit, University of the Western Cape, South Africa, <sup>2</sup>Child and Family Studies, University of the Western Cape, South Africa

## Summary

This study illustrates how student agency is formed based on the lecturer-student relationship, learning support and learning experiences in an interprofessional education environment. This study assessed the association of the lecturer-student relationship, learning support and learning experiences on student agency in an interprofessional health science faculty. A cross-sectional study was conducted with 266 conveniently sampled 3rd year students in a Faculty of Community and Health Sciences. The results of this study showed significant positive associations for student agency with student learning experiences ( $r=.292, p<0.001$ ), the lecturer-student relationship ( $r=.333, p<0.001$ ) and learning support ( $r=.209, p<0.001$ ). Furthermore, the lecturer-student relationship was positively associated with learning support ( $r=.623, p<0.001$ ) in an interprofessional health science faculty. This paper concludes that there are positive outcomes to interprofessional education practices through the development of student agency.

## Introduction / Background

Interprofessional practice and education is outlined as a process that allows for understanding of collaborative student learning in a way that fosters engaged learning and teaching activities (Healy, Flint & Harrington, 2014). The use of interprofessional education is also useful because it provides a space to address social inequalities by practising the culture of working together in a way that creates an atmosphere of learning across diverse contexts. Such practices may strengthen students' understanding about patients from a specific community, and measures that should be taken for improved health outcomes (Schmitt, Blue, Aschenbrenner, & Viggiano, 2011). Through these practices, student agency can be fostered through collaborative interaction within an interprofessional learning environment. This paper purports that student agency is critical for positive educational experiences regarding the student-lecturer relationship, learning support offered by different departments, learning experiences for success and self-esteem in interprofessional education.

## Methods

Two-hundred and sixty-six ( $n=266$ ) purposively sampled third year students from eight different departments or schools in a Faculty of Community and Health Sciences participated in this cross-sectional study. The data collection instrument utilised a modified self-administered instrument, including that of Bozalek & Lesko (2008) which measured the factors impacting on student learning. Students from this cohort were verbally invited to participate and these participants gave informed consent in writing. All data was collected by research assistants who also informed the participants of the aims and objectives of the project and the nature of the questionnaire. Participants were informed that participation was voluntary and that they could withdraw at any time without any undue consequences. The questionnaire took approximately 15-20 minutes to complete. The data was analysed using IBM SPSS v20 by means of descriptive and inferential statistics. A forward stepwise linear regression was conducted with an  $p$ -value of 0.05 set as the level of significance. Ethics clearance was obtained for this study.

Variables	n = 266	%
Gender	Female	70.3
	Male	26.7
	Did not disclose	3.0
Faculty of Community and Health Sciences	Psychology	30.1
	Nursing	20.7
	Sport recreation and exercise science	13.2
	Physiotherapy	11.3
	Social work	9
	Dietetics	5.6
School of natural medicine	School of natural medicine	6
	Occupational therapy	3.4
	Did not disclose	0.7

Table 1: Demographic Information

## Results

Table 2: Association between student agency, self-esteem, learning support, lecturer-student experience and learning experiences to succeed.

Variables	1	2	3	4	5
1. Student Agency	1				
2. Self Esteem	.0180	1			
3. Learning Support	.209*	0.009	1		
4. Lecturer-Student Experience	.333*	0.180	.623*	1	
5. Learning Experiences to succeed	.292*	0.560	.265*	.255*	1

\*Correlation is significant at the 0.01 level (1-tailed)

Four hundred questionnaires (400) were distributed to the entire third-year cohort ( $N=578$ ), of which 266 were returned ( $n=266$ ), indicating a response rate of 67%. The demographic profile indicates that the respondents from the Psychology Department were represented the most in this cohort (Table 1). The MeanAge of the participants was 23.6 years ( $SD = 4.9$ ). The majority of the participants (151/266) identified themselves as Coloured (58%). Seventy-two percent of the respondents were female (Table 1).

Table 2 indicates that student agency was positively correlated with learning support offered by departments within an interprofessional faculty of health science ( $r=.209, p<0.001$ ), lecturer-student experience ( $r=.333, p<0.001$ ) and learning experiences to succeed ( $r=.292, p<0.001$ ). Learning support was positively correlated with the lecturer-student relationship in an interprofessional faculty of health science ( $r=.623, p<0.001$ ) and learning experiences to succeed ( $r=.265, p<0.001$ ). The lecturer-student experience was also positively correlated with the lecturer-student experience within an interprofessional faculty of health science ( $r=.255, p<0.001$ ).

A forward stepwise linear regression analysis was used to develop a model for predicting student agency from the learning support given by departments, the lecturer-student experience and learning experience to succeed. Each of the predicting variables had a significant positive ( $p<0.01$ ) correlation with student agency. Learning support offered by departments accounted for 4% of the variance for student agency. The lecturer student experience accounted for 10.3% of the variance for student agency. Learning experiences to succeed accounted for 14.7% of the variance for student agency (Table 3).

## Conclusion

The results of this study showed significant positive associations between student learning experiences for success, the lecturer-student relationship and support offered by departments with student agency in an interprofessional health science faculty. Thus, this study provides insight into student agency, learning support, student learning experiences and self-esteem within an interprofessional faculty of health science at a historically disadvantaged higher education institution. Whilst there are many contributing factors to the development of student agency, it can best be explained by taking into consideration a number of modifiable factors which higher education institutions with interprofessional programmes may consider when developing academic programmes.

Table 3: Regression analysis predicting student agency

Predictor	B	SE B	$\beta$	$\Delta R^2$
<b>1</b>				
Constant (Student Agency)	43.07	2.706		
Learning Support	0.181	0.56	0.209*	4.0
<b>2</b>				
Constant (Student Agency)	33.33	3.526		
Lecturer-Student Experience	0.144	0.035	0.332*	10.3
<b>3</b>				
Constant (Student Agency)	5.001	8.752		
Learning Experience to Succeed	1.043	2.96	0.226*	14.7

Regression is significant at 0.01 (1-tailed t-test)

a. Predictors in the Model 1: (Constant), Learning Support by Department  
b. Predictors in the Model 2: (Constant), Learning Support by Department, Lecturer-Student Experience  
c. Predictors in the Model 3: (Constant), Learning Support by Department, Lecturer-Student Experience, Learning Experience to Succeed

## Implications / Take away message

- In order to develop a more agentic student, higher education institutions should offer activities that foster an improved the the lecturer-student experience.
- Higher education institutions that foster interprofessional practices should ensure that adequate support mechanisms are in place for students in order to provide a unique space for the development of student agency.

## Questions I would like audience to respond to

- Which other factors would you consider to contribute to student agency in interprofessional education?
- In what ways do you think student agency is manifested in a health sciences classroom?
- What could be done to improve the lecturer-student experience in health professions education?

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## References

- Healy, M., Flint, A., & Harrington, K. (2014). Engagement through partnership : students as partners in learning and teaching in higher education. United Kingdom: Higher Education Academy.
- Schmitt, M., Blue, A., Aschenbrenner, C. A., & Viggiano, T. R. (2011). Core Competencies for Interprofessional Collaborative Practice: Reforming Health Care by Transforming Health Professionals' Education. *Academic Medicine*, 86(11), 2011. <https://doi.org/10.1097/ACM.0b013e3182308e39>

## Correspondence

Simone Titus: [sititus@uwc.ac.za](mailto:sititus@uwc.ac.za)  
Nicolette V Roman: [nroman@uwc.ac.za](mailto:nroman@uwc.ac.za)