Relationship between student preparedness, learning experiences and agency: Perspectives from a South African university

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Background. One of the more discernible needs that challenges universities is addressing the level of preparedness of students entering the higher education environment. Students expect to participate in active learning, while at the same time adopting a certain level of agency to successfully pass through higher education.

Objective. To determine the relationship between student preparedness, learning experiences and agency of students in the Faculty of Community and Health Sciences (FCHS), University of the Western Cape (UWC), Cape Town, South Africa.

Methods. A cross-sectional study was conducted on 266 (N=578) convenience sampled 3rd-year students in the FCHS. Data were collected with an instrument constructed from items of evaluation from the departments in the FCHS and other validated instruments.

Results. Findings suggest that 3rd-year students perceive themselves as moderately prepared on enrolling at UWC (mean (SD) 13.74 (1.86)); current learning experiences are favourably indicated (94.04 (15.32)). On average, students perceive themselves to be agents of their own learning (51.56 (8.79)). Furthermore, a significantly positive relationship was found between learning experiences and agency.

Conclusion. This study broadens our understanding of the Vygotskian perspective of the zone of proximal development, where students bring their own knowledge, interact with lecturers who scaffold their learning, and then become agents in their own learning.

2,700 undergraduate students are enrolled across nine departments/schools (Nursing; Physiotherapy; Occupational Therapy; Social Work; Psychology; Dietetics; Natural Medicine; Public Health; and Sport, Recreation and Exercise Science). We are not aware of studies that have examined the relationship between the variables for this study.

**Methods**

This article forms part of a larger study that sought to investigate the learning needs of health science students at a university in southern Africa. A cross-sectional study was conducted on 266 (N=578) 3rd-year students from eight departments/schools in the FCHS.

**Sample**

Participants for this study were a convenience sample of 266 students in their 3rd year of study towards a degree registered in a health science faculty. Academic co-ordinators for 3rd-year programmes in the faculty allowed the research assistants access to their 3rd-year classes. Data were collected using a modified self-administered instrument completed by students from eight different departments/schools that offer undergraduate programmes.

**Research instrument**

The questionnaire was constructed from other relevant ones, including that by V. Bozalek et al. (unpublished report on the Competitive Research Grant received from the Council for Higher Education, 2008). The instrument consists of scales and subscales that measure preparedness, learning experience, prior learning experience, self-esteem, perceptions of academic literacy and numeracy skills, and student agency. The instrument was piloted before implementation to determine the time it would take to complete, and to ascertain whether there were any items that would require amendments. The instrument showed high reliability with a Cronbach alpha of 0.85.

**Procedures**

Departments and schools in the health sciences faculty were invited to participate in the study. All departments assigned a 3rd-year cohort to the project. Students from these cohorts were invited to participate and provided informed consent. Data were collected face-to-face by research assistants assigned to the project. These assistants informed participants of the objectives of the project, the nature of the questionnaire, that participation was voluntary, and that they could withdraw at any time without undue consequences. The questionnaire took approximately 15 - 20 minutes to complete. Permission to conduct the research was obtained from the Senate Research Grants Committee and the Ethics Committee at UWC. All information was strictly confidential and pseudonyms were used to protect anonymity of the participants.

**Data analysis**

Data were double captured in Microsoft Excel 2010. After matching both sets of data, the clean data were imported into SPSS Statistics version 20 (IBM, USA) for analysis by means of descriptive and inferential statistics. Descriptive statistics included percentages, means and standard deviations. Cross-tabulations were conducted in terms of gender. Inferential statistics included a correlation and linear regression analysis. An R-value of 0.0 - 0.2 suggests a weak relationship, 0.3 - 0.5 a moderate relationship and 0.6 - 1.0 a strong relationship.

**Results**

Four hundred questionnaires were distributed to the 3rd-year students (N=578), of which 266 were returned, indicating a response rate of 67%. Seventy-two percent of the respondents were female. The majority of respondents were from the psychology department (Table 1). The mean (SD) age of the participants was 23.57 (4.91) years. English was the first language of the majority of participants (48%); 61% did not have work experience before entering university; 47% considered their socioeconomic status as average; 41% had previously attended a historically disadvantaged school (41%); and 58% identified themselves as coloured. For the purpose of this study, historically disadvantaged schools are those situated in poverty-stricken areas, mostly townships, rural and farm areas, which are characterised by poor socioeconomic conditions and poor educational infrastructure and resources.\(^{(1,2)}\)

The results in Table 2 show that the majority of students considered themselves to be moderately prepared (13.74 (1.86)) and their learning experiences to be favourable (94.04 (15.32)). On average, students perceived themselves to be agents of their own learning (51.56 (8.79)). Further cross-tabulations were conducted in terms of gender. The results suggest that 43% of females and 38% of males were moderately prepared for university, even though the majority of participants were female.

Moreover, a correlation indicated significant positive relationships between student learning experiences and student preparedness (r=0.16; p<0.01), as well as student learning experiences and student agency (r=0.34; p<0.05). No relationship was found between student preparedness and student agency.

Two linear regression analyses were conducted (Table 3) to predict student agency. Student learn-
ing experiences in the classroom accounted for 11.3% of the variance for student agency. Student preparedness did not predict student agency.

**Discussion**

This study provides the first known information with regard to the relationship between student preparedness, learning experiences and agency. A large proportion of students are enrolled in the psychology and nursing fields – two of the largest departments in the faculty; however, the responses are a representation of a range of views from students across the faculty.

Participants reported that they were moderately prepared for university. This is not surprising, as a significant number of students are underprepared when entering higher education settings,\(^{[13]}\) regardless of gender. While the current challenge facing higher education institutions is not only about increasing throughput in terms of numbers and diversity of student population, it also involves ensuring quality education. Therefore, educational needs at universities should include addressing a general lack of academic preparedness, multilingual needs in English-medium settings, large class sizes and inadequate curriculum design.\(^{[2]}\)

Despite the moderate level of preparedness, a positive relationship between perceptions of student preparedness and learning experiences was observed. One of the major factors relating to low graduation rates in SA higher education is underpreparedness of students.\(^{[14]}\) Therefore, if students are better prepared for higher education before entering university, their experience in higher education should be greatly enhanced. However, it is a huge undertaking for a higher education institution to attempt to redress inequalities in the formal education system to address the underpreparedness of students. These findings are similar to those of Brissow and Wilkinson \(^{[15]}\) with regard to learning experiences and underprepared students, where students also had favourable learning experiences. Many university courses are theory driven, and assume that students have knowledge of real-world experiences that lead to them linking theory and practice.\(^{[2]}\) The higher education report on student experiences suggests that students are not necessarily underprepared, and that failure to succeed lies more in systemic weakness than in higher education.\(^{[2]}\) This implies a need for a deeper understanding of students who strive to achieve their full potential.

This study showed a positive relationship between learning experiences and student agency. Much has been said about poor graduation rates and a diminished learning culture among students. This study negates these arguments, proving that there is an indication that students who have a better learning experience take more responsibility for their own learning. The results also provide an understanding of the Vygotskian perspective of the role of the learning experience for underprepared students to become agents of their own learning. i.e that lecturers provide the learning experience for students to function optimally and be self-directed within the space of the ZPD. Student agency cannot and should not be ignored in the teaching and learning process.\(^{[14]}\) Students’ power (their agency) cannot be ignored as they negotiate their needs, which can be over determined by their social background, available resources, campus organisations and external pressures. Agency is seen as an important empowering and disempowering factor, as it enables and constrains the interpretation of actions, society and social interactions with people.\(^{[14]}\)

**Conclusion**

This study was limited to one of the 24 higher education institutions in SA. The sample included a larger proportion of females, which may suggest a bias, but moderate preparedness was found for all students regardless of gender. The study indicates that there is a very enmeshed and complex relationship between teaching and learning, which may further be complicated by other factors, which were not the focus of this study. However, our study showed that students who are better prepared for the higher education setting have better learning experiences. These settings may provide higher education specialists with a unique opportunity in ZPD to provide academic activities that enhance a positive learning experience.

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**Table 2. Associations between variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean (SD)</th>
<th>Student learning experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student preparedness</td>
<td>11</td>
<td>19</td>
<td>13.74 (1.86)</td>
<td>0.16*</td>
</tr>
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<td>Student agency</td>
<td>26</td>
<td>78</td>
<td>51.56 (8.79)</td>
<td>0.34*</td>
</tr>
<tr>
<td>Student learning experiences</td>
<td>50</td>
<td>128</td>
<td>94.04 (15.32)</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation significant at the 0.05 level (two-tailed t-test).  
*Correlation significant at the 0.01 level (two-tailed t-test).

**Table 3. Regression analyses predicting student agency**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>ΔR²</th>
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<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant (student agency)</td>
<td>45.52</td>
<td>4.55</td>
<td>0.44</td>
<td>0.09</td>
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<tr>
<td>Student preparedness</td>
<td>0.44</td>
<td>0.33</td>
<td>0.09</td>
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<td>2</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Constant (student agency)</td>
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<td>3.56</td>
<td>0.20</td>
<td>0.04</td>
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<tr>
<td>Student learning</td>
<td>0.20</td>
<td>0.04</td>
<td>0.34*</td>
<td>11.3</td>
</tr>
</tbody>
</table>

*Regression is significant at p<0.05 level.

**References**