ABSTRACT

This research sought to determine the effects of students’ perceptions of their abilities to perform various functions for successful study through ODeL on their actual performance. The study also focused on determining their understanding of their institutional context, specifically what differentiates open distance and e-learning (ODeL) institutions from contact institutions and the type of attributes, resources and support required to succeed in ODeL.

The target population was students who had started studying at the University of South Africa (Unisa) for the first time during the first semester of 2015 and then re-registered again during the second semester of the same year.

To measure students’ perceptions, three self-efficacy measures were used, namely self-regulated learning self-efficacy (SRLE), distance learning self-efficacy (DLSE) and computer and online technologies self-efficacy (COTSE). SRLE was an adaptation of the Motivated Strategies for Learning Questionnaire (MLSQ) by Pintrich and de Groot (1990) and comprised fourteen (14) statements which were divided into three (3) subscales. These subscales were student persistence self-efficacy (SPSE), time and study environment management self-efficacy (TSEMSE) and seeking help self-efficacy (SHSE). The SPSE subscale had four (4) statements, TSEMSE had five (5) statements and SHSE had four (4) statements. All statements for the various subscales were rated using a 6-point Likert scale, from ‘strongly disagree’ to ‘strongly agree’.

DLSE was an adaptation of the DLSE scale by Zhang, Duan, and Wu (2001) and had nine (9) statements which were rated using a 6-point Likert scale, from strongly disagree to strongly agree. COTSE was an adaptation of Miltiadou and Yu's (2000) Online Technologies Self-Efficacy Scale (OTSES) and had thirty-two (32) statements, which were divided into four (4) subscales, namely internet competencies self-efficacy (ICSE), myUnisa self-efficacy (MUSE), myLibrary self-efficacy (MLSE) and email communications self-efficacy (ECSE).
Unlike SRLE and COTSE, each of these statements in the COTSE scale was rated using a four (4)-point Likert scale, from ‘not confident at all’ to ‘very confident’.

To measure student success, students’ credit scores were obtained from the student database. A single case embedded study was used as a research strategy, and within that, qualitative and quantitative data was collected using an online survey. Permission was obtained from ethical committees at the University of Witwatersrand and at Unisa before commencing with survey administration and before requesting student data from the database. The survey was administered to 15 557 students but only 670 students responded. However, only 263 of the 670 were deemed as suitable for data analysis, this representing a response rate below 2.0%. Responses were received from mainly African females (43%) who were employed (63%) and had no dependents (69%). Furthermore, most of the respondents had no prior distance learning experience (84%).

The results of the quantitative analysis indicated a general understanding of the attributes, resources and support needed to study successfully through ODeL. Understanding of institutional context was reinforced by the results of the qualitative data. Regarding the effects of self-efficacy on student performance, DLSE had more importance in this study than SRLE or COTSE.

Overall, only DLSE was found to have a significant effect on academic attainment albeit with a low effect (r=-.13), explaining only 1.7% of the variation in the academic achievement between successful and unsuccessful students.

DLSE also explained 10% of the variation in academic achievement between successful and unsuccessful students who, although new to Unisa, were not new to higher education (transfers). DLSE was also significant among those with no prior distance learning experience, r=-.17, explaining 3% variation between successful and unsuccessful students. Statistically significant differences were also found in DLSE levels for students with 6-9
modules whereby successful students had significantly higher levels of DLSE than unsuccessful students, \( r = -0.20 \).

COTSE was statistically significant among students aged below 30 years, with a small to medium effect of \( r = -0.16 \), thus explaining 25.6% variation between successful and unsuccessful students. SRLE had no significance at all in this study.

**Keywords:** distance learning self-efficacy; self-regulated learning efficacy; computer and online technologies self-efficacy; academic attainment; distance-learning success