Does self-directed learning readiness predict undergraduate students' instructional preferences?

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Literature Review

Self-directed learning requires the learner to take responsibility for, and manage, their own learning needs (Abd-el-fattah, 2010; Fisher et al., 2001).

Individuals who are strong self-directed learners are able to identify learning goals, formulate plans to meet these goals, implement learning strategies, and evaluate the degree to which they have achieved these goals.

While many education systems follow a pedagogical approach to learning (teacher-centered), self-directed learning is more aligned with an andragogical approach (student-centered).

We hypothesized that self-directed learning readiness will be positively related to preferences for student-centered instructional techniques and will be negatively related to preferences for teacher-centered instructional techniques.

Methods

Collected online and in person (through PSYC Classes).

256 participants (81% female); average age 22 years (SD = 4.05).

60 year-one students (23%), 113 year-two students (44%), 50 year-three students (20%), 26 year four-students (10%), and six year-five students (2%).

Students completed a 27-item modified version of the SDLRS and the 40-item Instructional Preferences Scale (IPS; Baeten et al., 2016).

SDLRS has three subscales: Self-Management (α = .90), Desire to Learn (α = .81), and Self-Control (α = .83).

IPS has four subscales: Knowledge Construction (α = .76), Teacher Direction (α = .82), Cooperative Learning (α = .89), and Passive Learning (α = .80).

Results

We conducted four linear regressions with the three SDLR subscales as the predictors and the four IPS subscales as separate dependent variables.

Three of these regressions were statistically significant - **PL**: $F(3, 242)$ = 6.06, p = .001, r^2 = .07 (small effect); **TD**: $F(3, 242)$ = 6.06, p < .001, r^2 = .08 (small effect); **KC**: $F(3, 242)$ = 16.55, p < .001, r^2 = .17 (medium effect). One was not - **CL:** $F(3, 242)$ = 2.16, p = .052, r^2 = .03 (small effect).

The PL, KC, and TD scales each had 1 statistically significant predictor (see Table).

Multiple Regression Analysis Results for the Prediction of Teaching Preferences

Measures	B	SE B	β	t	p
Passive Learning (PL)					
Self-Management	.47	.12	.35	3.98	**<.001**
Desire to Learn	-.06	.13	-.04	3.85	.632
Self-Control	-.22	.16	-.13	2.11	.168
Knowledge Construction (KC)					
Self-Management	.02	.08	.02	.22	.826
Desire to Learn	.37	.09	.31	3.99	**< .001**
Self-Control	.16	.11	.12	1.38	.170
Teacher Direction (TD)					
Self-Management	-.02	.08	-.03	-.31	.757
Desire to Learn	.13	.09	.12	1.47	.143
Self-Control	.23	.11	.20	2.16	**.032**
Cooperative Learning (CL)					
Self-Management	-.01	.11	-.01	-.07	.947
Desire to Learn	.21	.13	.13	1.56	.120
Self-Control	.11	.16	.07	.69	.491

Discussion

The study found minimal support for our hypotheses that SDLR would predict student preferences for a teacher-centered or student-centered classroom.

The only results that match our hypotheses was desire to learn as it was more favorable of classrooms that encouraged students to be active in the construction of their knowledge.

Those who are high in SDLR may prefer teacher direction because it gives them stronger control over what they need to learn and prefer passive learning because it gives them the ability to take the time to organize the information they are presented.

Limitations

Lack of external validation and generalizability on the revised SDLR scale

All data was collected from a single university and may not generalize to other universities

All data was collected through self-report and has the limitations associated with self-report data

Acknowledgments/References

References

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