Moodleの受容性・実際の利用・達成度:
Personality特性とオンライン学習への自己効力感の影響

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Rationale

- コロナウイルスパンデミック(COVID-19)の制約を受ける教育環境と、オンライン学習とテクノロジーを使った解決策が期待されている実情を踏まえ、本研究では、パーソナリティ特性とオンライン学習への自己効力感が、どのように学習管理システムMoodleに対する受容性、実際の利用、および科目の達成度に影響を与えるかについて検証した。研究の結果、協調性と誠実性がオンライン学習への自己効力感に直接的な影響を与え、さらに、Moodleの受容性には間接的な効果を及ぼすことが明らかになった。5因子モデルのパーソナリティ特性はいずれも実際のMoodle利用には影響を与えず、Moodle利用の指標としては，Moodleへの受容性が信頼性に欠けることが示唆された。科目の達成度には、協調性と誠実性のみが間接的な影響を与えていた。再指定モデルにおいて、科目の達成度の予測における協調性と誠実性の重要性と，それらがオンライン学習自己効力感、Moodleへの受容性、実際の利用に果たす役割が確認された。教育者の視点から，現在の教育事情における本研究の意義を考察する。

- Informed by the educational conditions being shaped by the coronavirus pandemic (COVID-19) and an increased reliance upon online learning solutions and technologies, this article examines the effect of personality traits and online academic self-efficacy on the acceptance, actual use and course achievement in the Moodle learning management system. The results show that agreeableness and conscientious have positive direct effects on online academic self-efficacy in addition to positive indirect effects on the acceptance of Moodle. None of the five-factor model personality traits had an influence on actual Moodle use which suggests that Moodle acceptance is not a reliable indicator of actual Moodle use. Only agreeableness and conscientious had an indirect effect on course achievement. A respecified model further affirmed the importance of agreeableness and conscientious and their role in online academic self-efficacy, the acceptance and actual use of Moodle and course achievement outcomes. The discussion highlights the implications to be drawn from the results in relation to the current educational landscape from the perspective of the educator.

Full Structural Model Hypotheses Testing
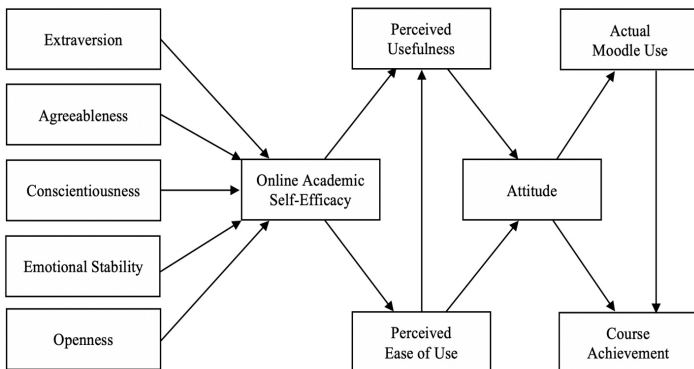
	OAS (R^2=.170)		PEU (R^2=.051)		PU (R^2=.190)		ATT (R^2=.414)		AMU (R^2=.007)		CA (R^2=.132)	
	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect
EXTR	.093			.021		.027		.018		.002		.003
AGRE	.217**			.049*		.063*		.043*		.004		.006*
CONS	.348***			.079**		.100***		.068***		.006		.010*
EMOS	-.123			-.028		-.036		-.024		-.002		-.003
OPEN	.096			.022		.028		.019		.002		.003
OAS			.226**		.212**	.076**		.196***		.017		.028*
PEU					.336***		.113	.199***		.027		.044*
PU							.592***			.051		.084
ATT									.086		.114	.029
AMU											.335***	

The hypothesized model of interactions and the direct and indirect path coefficients in the initially tested model.
Method ML; Model fit: [X2=76.611(38), p=0.001, NC=1.885, GFI=0.92, CFI=0.85, RMSEA=0.07 (90% CI: 0.049, 0.105)] *p<0.01, **p<0.01, ***p<0.001.
EXTR=Extraversion, AGRE=Agreeableness, CONS=Conscientiousness, EMOS=Emotional Stability, OPEN=Openness, OAS=Online Academic Self-Efficacy, PEU=Perceived Ease of Use, PU=Perceived Usefulness, ATT=Attitude, AMU=Actual Moodle Use, CA=Course Achievement.
The standardized mediated effects are bootstrap approximations obtained by constructing two-sided bias-corrected confidence intervals.

Outcomes and Observations

- The primary findings reported concern the role of personality traits in the acceptance and use of technology. Agreeableness and conscientious are the two most dominant traits in terms of their direct and indirect effect on the modelled interactions.
- While the trait of conscientiousness underpins all productive study behaviours, traits such as agreeableness appear to be favoured within courses such as the one used in the current study.
- Dhawan (2020) highlights how "pedagogical and technical competency of online educators is of utmost importance. Rigorous quality management programs and continuous improvement are pivotal for online learning success and making people ready for any crisis-like situation" (p. 18).
- There remains a tendency among some educators to view Moodle use as a learning outcome rather than as a tool for the communication and assessment of more comprehensive learning objectives.
- Moodle plugins that undermine responsibility and adaptive self-regulated learning skills are often promoted as technological pacifiers to maladaptive behaviours in the absence of efforts which guide students toward achievement related improvement (see Johnson et al. 2017 for a context specific example). Such tech-dominant approaches need to be eradicated and replaced with diversified online solutions which attract and sustain topical interest while maintaining pedagogical integrity through the promotion of adaptive self-regulatory behaviours.