

VARIABLES AFFECTING ENGAGEMENT IN ONLINE
LEARNING: COVID-19, SELF-EFFICACY, LOCUS OF
CONTROL, ANXIETY

DR LINDA DINC
SHSS/PSYCHOLOGY



Background

- **Croxton (2014)** – A prominent variable affecting engagement in online learning is the level of interaction with instructors and peers, however, it is not clear how learner related dispositional variables contribute to persistence and general satisfaction in online learning .
- Some of these variables are **locus of control**, **perceived self-efficacy** as characteristics of the learner and **general learner satisfaction** as a learning variable.
- **Internal locus of control (ILOC)** is the belief in oneself that one can control future outcome of events in their lives (Rotter, 1966).
- **Abdalla, Abdelal and Soon (2019)**- Individuals with ILOC tend to be more achievement-oriented, active information and knowledge seekers and ILOC is one of the key factors determining academic performance.
- **ILOC is closely linked with self-efficacy.** Bandura (1977) defined self-efficacy as the belief of oneself in their own capabilities to perform actions or achieve set goals.
- **Shah et al. (2021)**- Only indirect effect of online learning on student engagement after the pandemic, through psychological factors, such that engagement depended on the extent to which students perceived their psychological needs were satisfied/dissatisfied.

Hypotheses

- H_1 : There will be positive correlations between internal locus of control and self-efficacy.
- H_2 : Self-efficacy will moderate the effect of internal locus of control on general satisfaction.
- H_3 : There will be a difference in reported academic performance related to COVID-19 anxieties among learners with high and low general anxiety disorder.
- H_4 : Learners with high level general anxiety will report higher negative effect of moving from face to face to online learning platform as compared to learners with low level general anxiety disorder.

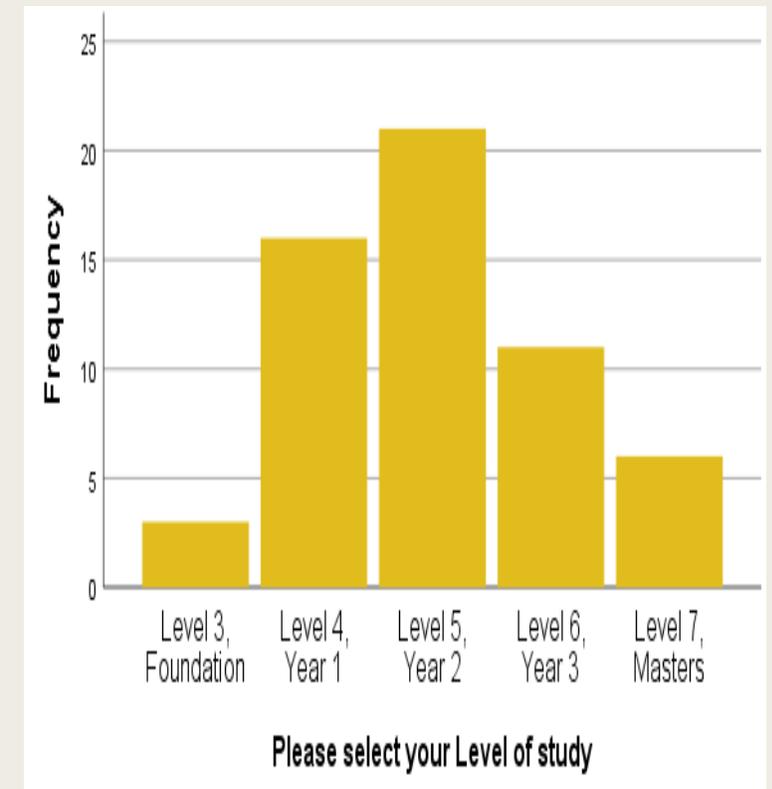
Method

■ Participants:

- The sample consisted of 57 participants, with 48 females ($M = 23.29$ years of age, $SD = 5.80$) and 9 males ($M = 26.88$ years of age, $SD = 12.83$).

■ Measures:

- *Self-efficacy*: 'I am certain I can understand the ideas taught in this course'
- *ILOC*= 'My life is determined by my own actions'
- *GAD-7*= 'Feeling nervous, anxious or on edge'
- *COVID-19 Anxiety*=Do you feel your performance was affected as a result of an anxiety related to COVID-19 ?
- *General Satisfaction*= 'I would recommend this course to others'



Qualtrics Survey

Findings

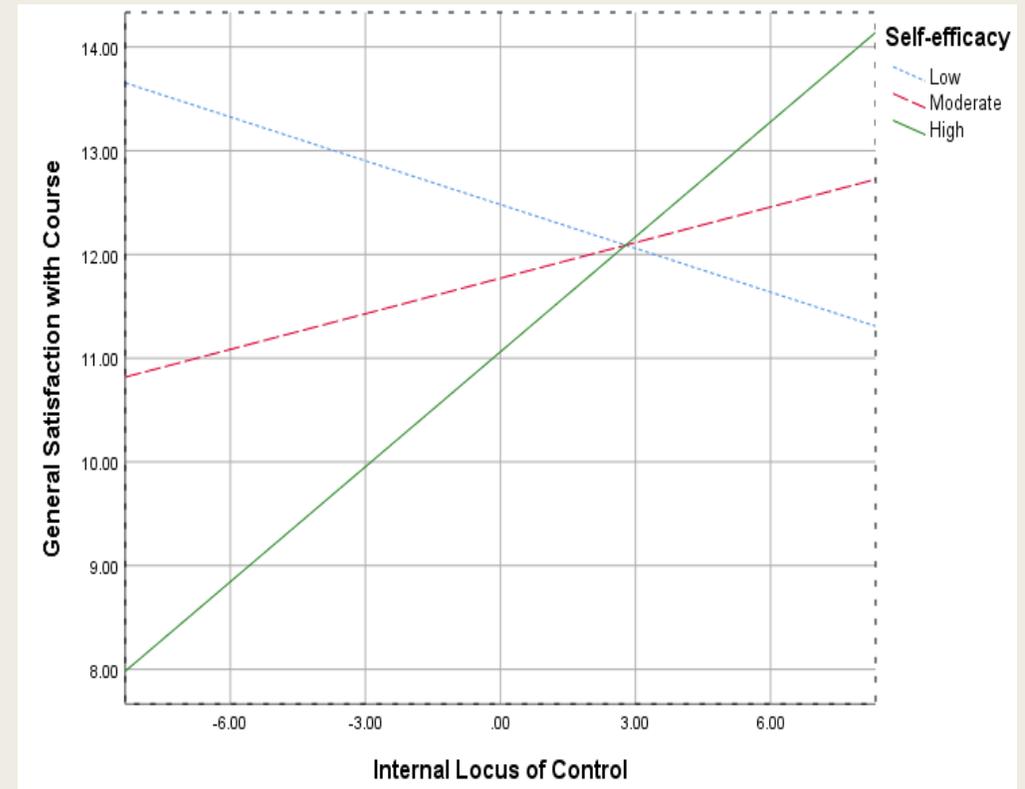
Correlations

Variable	1	2	3	4
1. General Sat. with course	-			
2. Self-efficacy	-.04	-		
3. General Anxiety Disorder	-.14	-.26*	-	
4. Internal Locus of Control	.00	.45**	-.16	-
Mean	12.50	47.37	19.47	33.54
Standard deviation	5.21	8.36	7.18	6.52

Note. GAD=General Anxiety Disorder. ILOC=Internal locus of control
 * $p < .05$; ** $p < .01$; *** $p < .001$

Bivariate Correlations and Descriptive Statistics for the Self-report Measures

Moderation

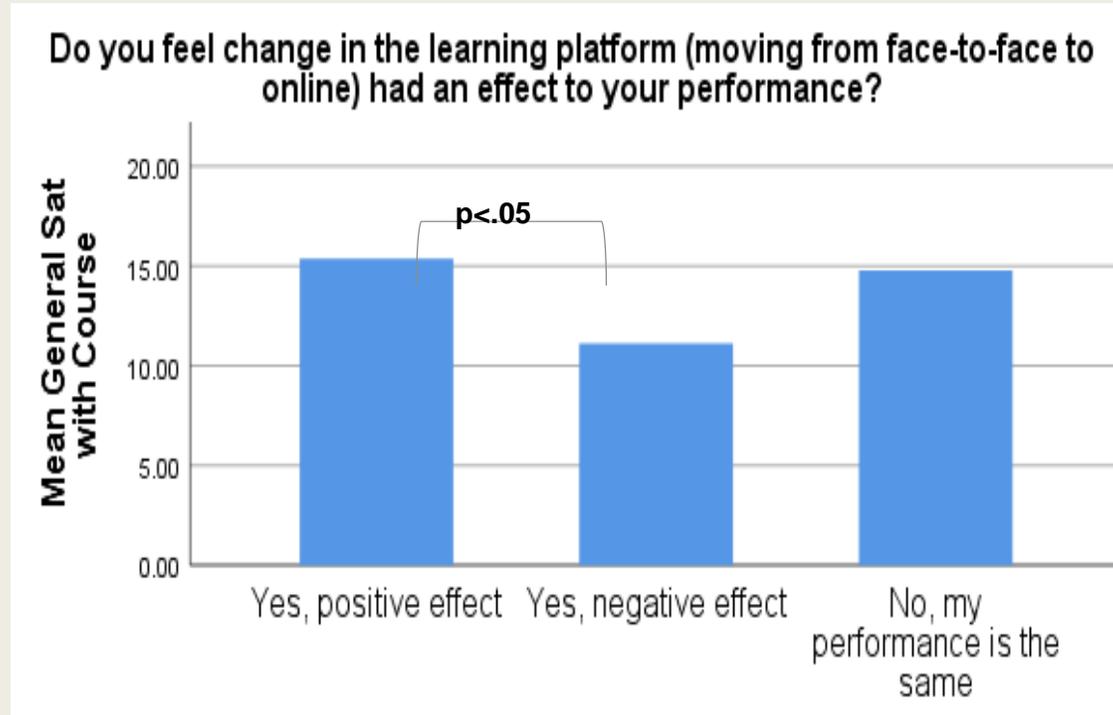


The relationship between internal locus of control and general satisfaction with course at low moderate and high levels of self-efficacy

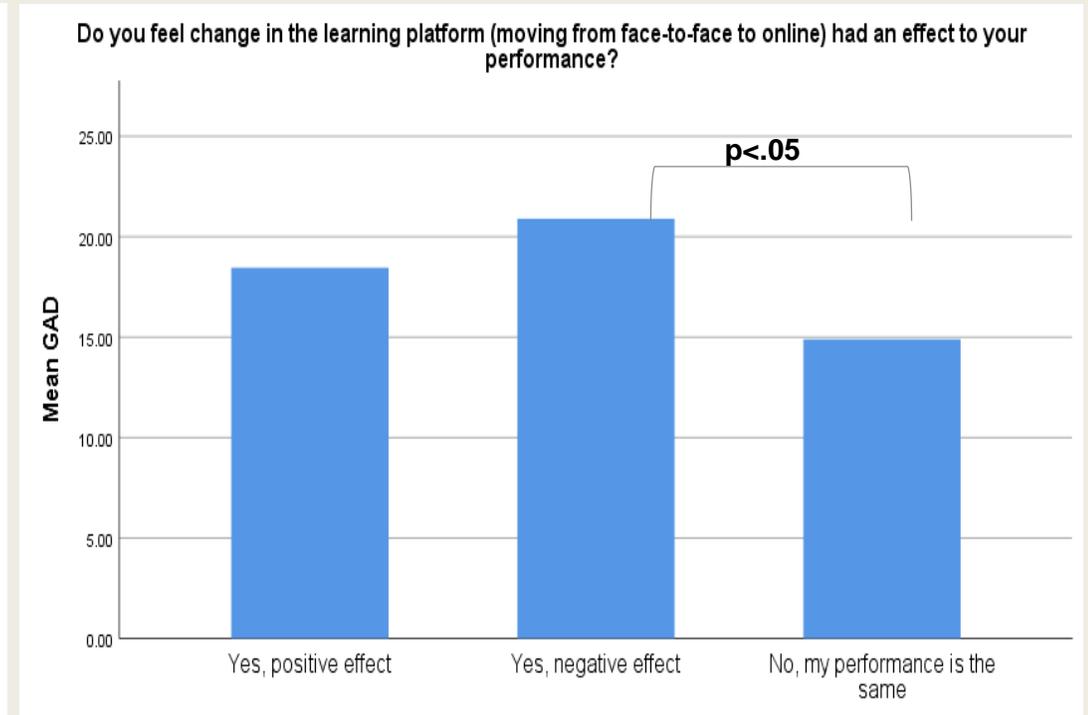
Findings

Did moving from face-to-face to online affect general satisfaction?

1. General Satisfaction



2. General Anxiety



Students with prior general anxiety were affected more from moving to online

Students who reported low satisfaction were those who reported negative affect of moving online.

Conclusion

- Positive correlations between ILOC and Self-efficacy; negative between GAD and self-efficacy.
- Difference in COVID-19 anxiety for high and low GAD.
- Higher self-efficacy, higher internal locus of control and general satisfaction.
- Moving online affect General Satisfaction; GS differ for different levels of GAD

Future Directions

- Small sample size; however, data shows similar pattern to previous research
- Key variables to consider when designing/planning teaching:
 - *Individual differences:*
 - Aim to **increase self-efficacy** through e.g., positive/constructive feedback
 - Aim to **reduce anxiety**,
 - *e.g., break down tasks, more information about what is expected, set tasks similar to the assessments, chance to practice.*
 - *This may be more important for large modules (Level 4, Level 5)*