

# A Study of Intrinsic Motivation and Self-Determination Theory in Clerkship Students Enrolled in Two Different Educational Models

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OCTOBER 17<sup>TH</sup>, 2016

# Background

- ▶ Self determination theory (SDT)– coined by Deci and Ryan
- ▶ Two well defined types of motivation
  - ▶ Extrinsic motivation
  - ▶ Intrinsic motivation
- ▶ There are three essential needs involved in self determination
  - ▶ Competence
  - ▶ Autonomy
  - ▶ Psychological relatedness
- ▶ The degree of intrinsic motivation in physicians contributes to the development of intrinsic motivation in patients for changing health behaviours

# Rationale for this study

- ▶ Several studies have shown that the development of intrinsic motivation in medical students leads to increased
  - ▶ Interest
  - ▶ Learning
  - ▶ Effort
  - ▶ Commitment
  - ▶ Satisfaction with education
- ▶ Medical school curriculum planners espouse promoting intrinsic motivation, while limiting extrinsic motivation
- ▶ Evaluations of motivation in medical school education are limited

# Study Goals

- ▶ To evaluate intrinsic and extrinsic motivation by surveying students participating in the traditional block clerkship and those in the longitudinal integrated clerkship at Cambridge Health Alliance
- ▶ Secondary goal: We also aim to assess if the level of perceived autonomy support from the OB/Gynecology Department is different between educational models
- ▶ The two groups of students received two questionnaires over the academic year

# General Causality Orientations Scale

**Your friend has a habit that annoys you to the point of making you angry. It is likely that you would:**

a) Point it out each time you notice it, that way maybe he/she will stop doing it.

1	2	3	4	5	6	7
very unlikely			moderately likely			very likely

b) Try to ignore the habit because talking about it won't do any good anyway.

1	2	3	4	5	6	7
very unlikely			moderately likely			very likely

c) Try to understand why your friend does it and why it is so upsetting for you.

1	2	3	4	5	6	7
very unlikely			moderately likely			very likely

# Learning Climate Questionnaire

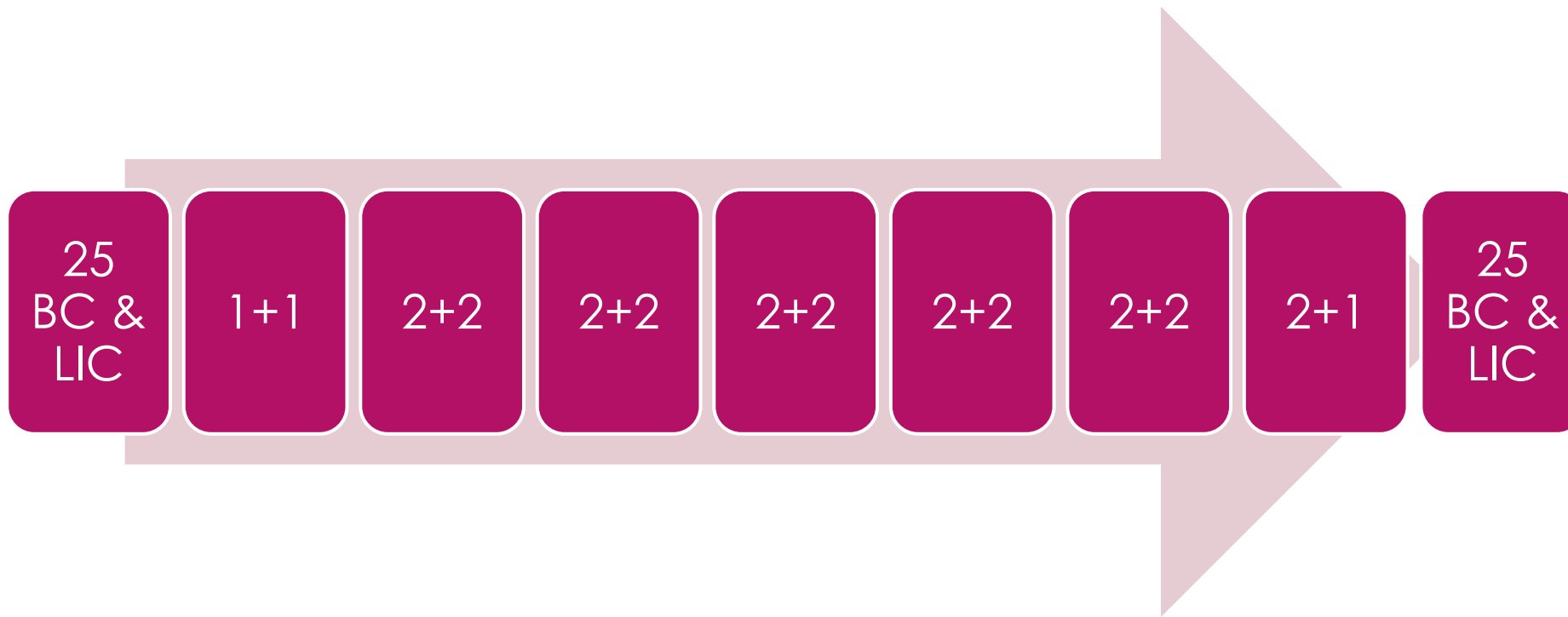
**I feel that the Obstetrics and Gynecology (Ob/Gyn) instructors provided me choices and options.**

1	2	3	4	5	6	7
Strongly			Neutral			Strongly
Disagree						Agree

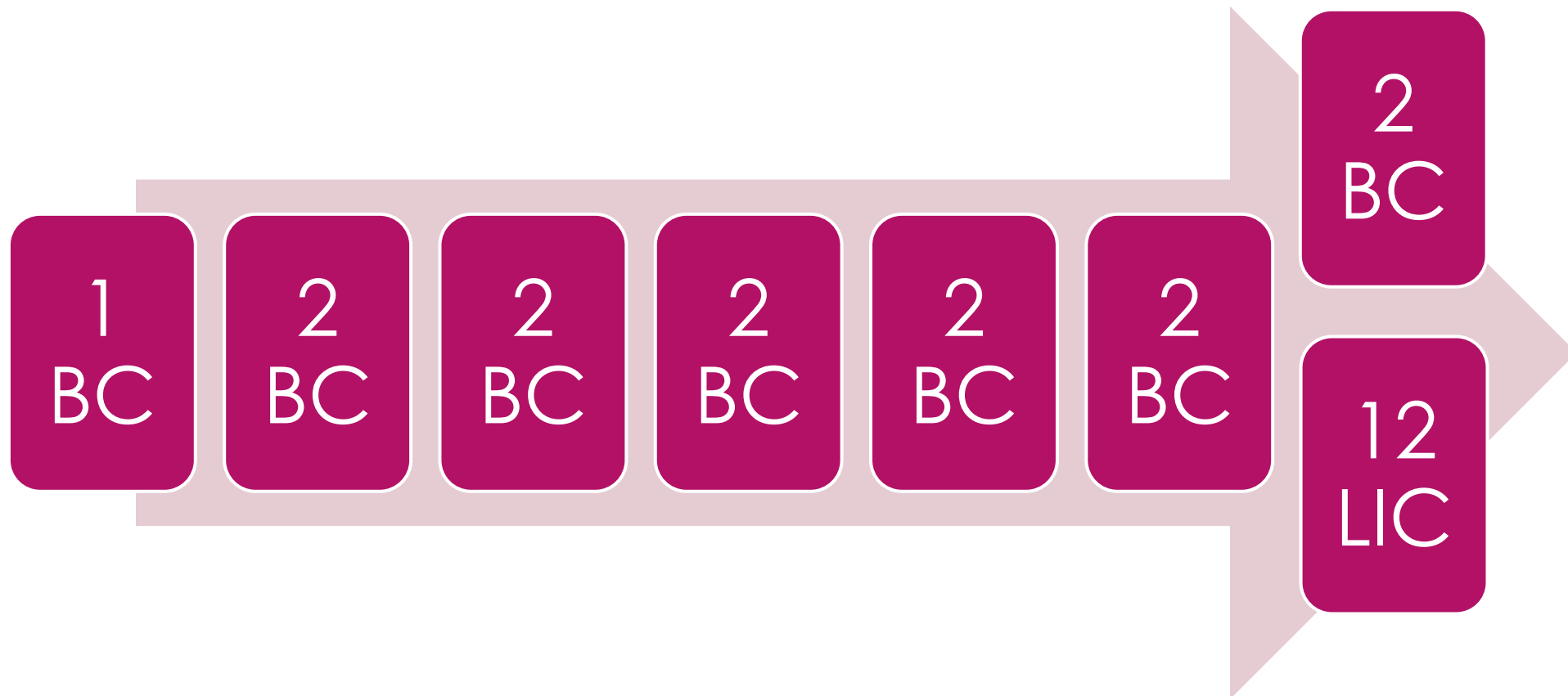
**I feel understood by my Ob/Gyn instructors.**

1	2	3	4	5	6	7
Strongly			Neutral			Strongly
Disagree						Agree

# Experimental Design GCOS



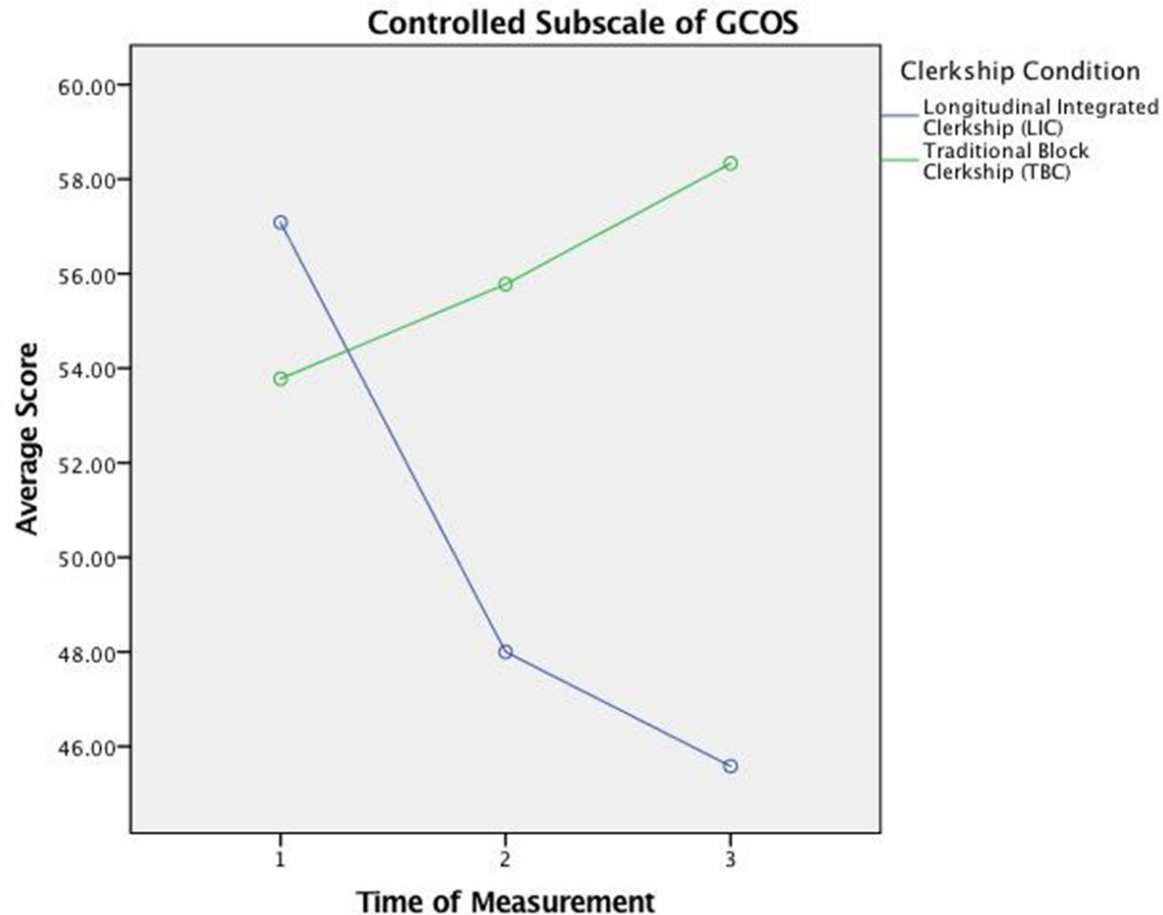
# Experimental Design LCQ



# Results

- ▶ Data was collected on:
  - ▶ 13 traditional block students
  - ▶ 12 longitudinal clerkship students
- ▶ Mixed and One-Way ANOVAs were performed to assess for a change over time in both groups

# Results



1) Initially, TBC and LIC students showed no difference in extrinsic motivation, but TBC students showed significantly more extrinsic motivation than the LIC students at mid-clerkship ( $P < .01$ ) and clerkship's end ( $p < .01$ ).

2) LIC students displayed decreased extrinsic motivation over time ( $p < .01$ ). TBC students demonstrated no significant change.

3) Intrinsic motivation did not change over time for either group.

# Results

- ▶ There was no significant difference in perceived autonomy support in students in the LIC compared with those in the TBC
- ▶ There was no significant difference between the LIC and TBC students in the likelihood of choosing a career in OB/Gyn

# Conclusions and Future Directions

- ▶ 1) Preliminary results demonstrate that LIC students displayed decreased extrinsic motivation when compared with TBC students in their third year. Lack of change in intrinsic motivation may be due to
  - ▶ a) small sample size or
  - ▶ b) both self-selected groups being highly intrinsically motivated.
- ▶ 2) Student motivation is an area for future research in LICs. This domain of research may provide insights into LIC and TBC processes and drive “translational” application in program design, pedagogy, and faculty development.

# Questions

