Refining Success and Dropout in MOOCs Based on the Intention-Behaviour Gap

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Refining Success and Dropout in MOOCs Based on the Intention-Behaviour Gap

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Background

Currently, success measurement of MOOCs is certificate- and completion-centric and fails to take student intention into account. This results in very high dropout rates of 90-95%. While this view of success has been critiqued by the research community, no suitable alternative which takes the extraordinary (online) learning circumstances into account, has been developed. Yet…..

This study addresses this gap and proposes a theoretically grounded framework which introduces a refined typology that finds its origin in student intention and subsequently enhances insight into the dynamics of MOOC-learning.

Theories

Fishbein & Ajzen (2011): The reasoned action approach – this framework is centered around the formation of an intention and the transformation of this specific intention to actual behaviour. If actual behaviour does not equal intention this is called the intention-behaviour gap.

Gollwitzer (1990): The Rubikon model of action phases – according to Gollwitzer (1990) the process of the formation of an intention to evaluating actual behaviour can be divided into four phases; pre-decisional phase - pre-actional phase - actional phase – post-actional phase.

Research Question

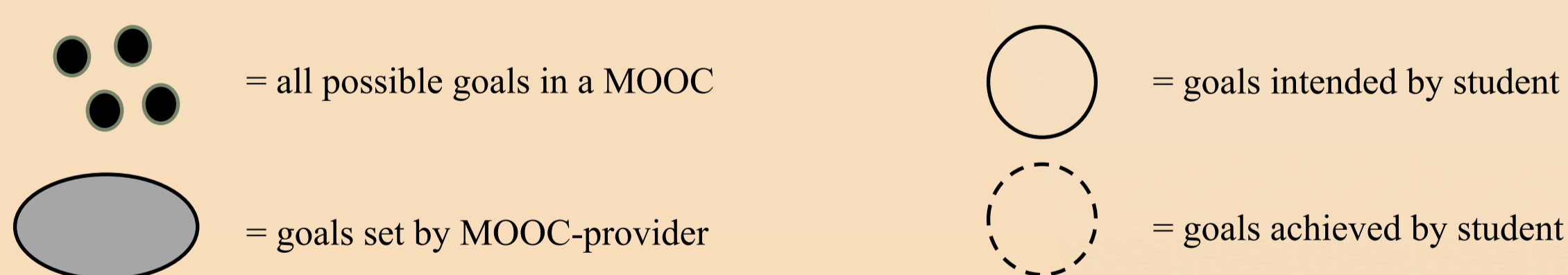How can success and dropout in MOOCs be realistically measured?

Method

Literature review

Intention-Behaviour Patterns and Dynamics in MOOCs

a. Type 11: All individual intended goals are achieved

b. Type 12: Achievement is less than intended goals (reduction of initial set of intended goals)

c. Type 13: Achievement exceeds initial intended goals (augmentation of initial inention)

d. Type 21 : Achievement is less or completely different than intended but fully compensated with other goals

e. Type 21 : Achievement is less or completely different than intended but fully compensated with other goals

f. Type 22 : Achievement is less or completely different than intended and not fully compensated with other goals (under compensation)

g. Type 22: Achievement is less or completely different than intended and not fully compensated with other goals (under compensation)

h. Type 23: Achievement is less or completely different than intended yet more than fully compensated with other goals (over compensation)

i. Type 23: Achievement is less or completely different than intended yet more than fully compensated with other goals (over compensation)

Figure 1. Venn diagrams to illustrate intention-behaviour patterns that identify MOOC-takers

= all possible goals in a MOOC   = goals intended by student

= goals set by MOOC-provider   = goals achieved by student

These Venn-diagrams elicit the differences between intention and actual behaviour with respect to goal achievement. A student's individual set of intended goals may be quite different from a MOOC-provider's set of goals. In our reasoning the individual's intention is leading for the measurement of success or failure.
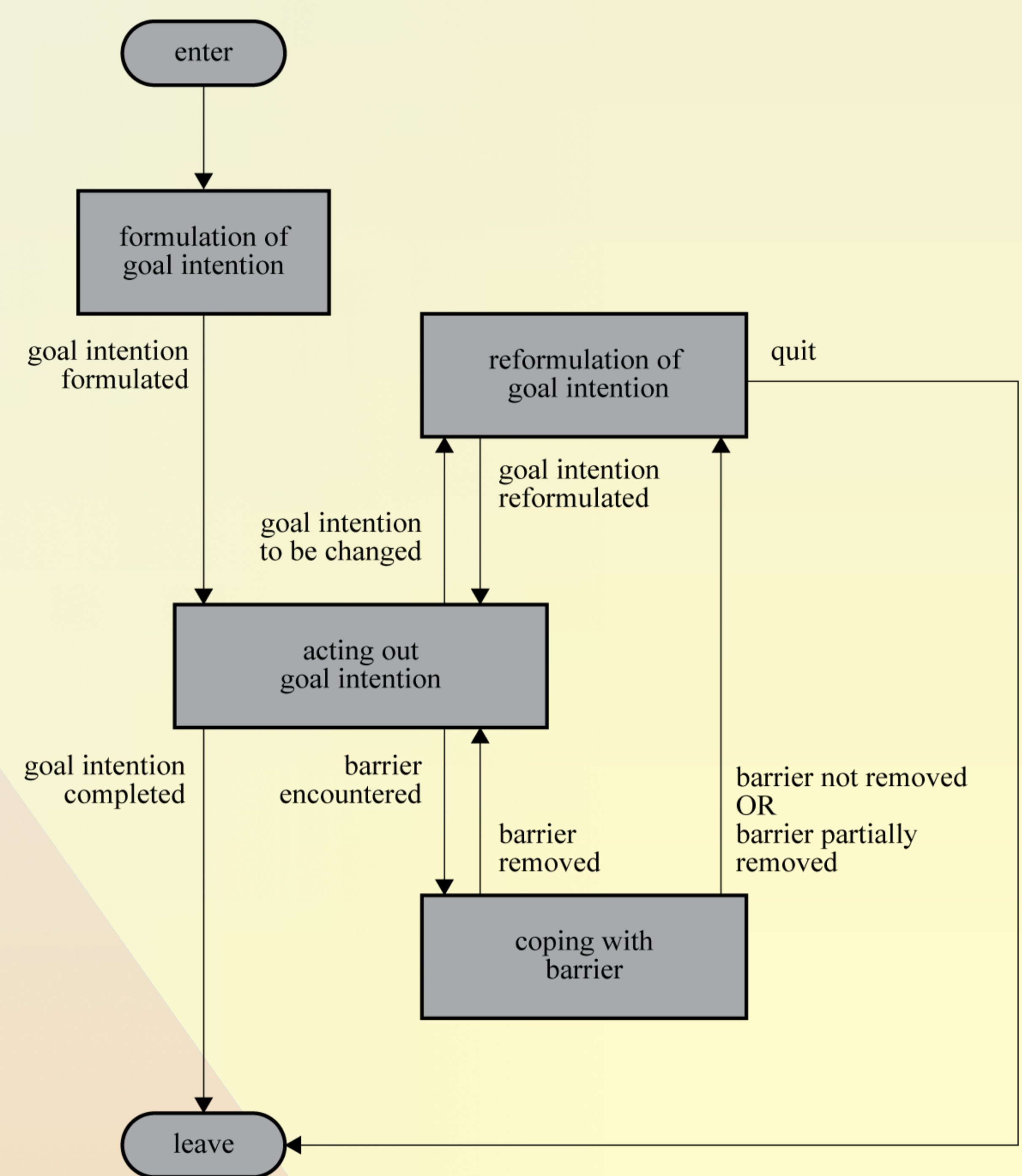

Figure 2. State diagram intention-behaviour process

This state diagram in unified modeling language (UML) depicts the dynamics of the intention-behaviour process. Not all MOOC-takers will pass all four respective states before leaving (finishing). Within each state MOOC-takers have to decide which actions to undertake. An action will change their condition which will subsequently lead to a certain event. This event then determines the next state a MOOC-taker will move to. For example, certain actions in the 'coping with barrier' state can lead to the event 'barrier removed'. This event then leads the MOOC-taker back to state of 'acting out intention'.

Conclusion

This study argues that intention of the individual should be taken as a starting point for measuring MOOC success and dropout. A new typology of MOOC-takers based on intention-behaviour patterns is proposed. In addition, state and flow diagrams (not included here) reflect the complexity and dynamics of the intention-behaviour process.

With this model we aim to establish a paradigm shift in the way success and dropout in MOOCs are currently assessed. Although further research has to validate the practical applicability of the model, it is a first step towards more profound and theoretically grounded research into dropout in MOOCs.

Take home message

New contexts ask for reconceptualization of variables from old contexts. The end qualification-driven success measure of traditional education can not be applied to the totally different educational context of MOOCs and realistically represent success and failure.

Not re-conceptualizing variables may cause for unnecessary interventions and unjust critique.

Key words

MOOCs, Success, Dropout, Intention, Behaviour

References

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