Will I Continue? Evaluation of Study Choice in First Year Students: a Structural Equation Modeling Approach

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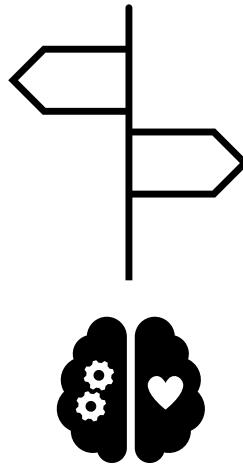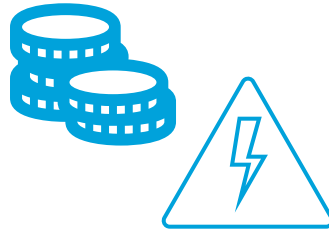
ZU YD

Research team
- Klaartje van Genugten | Zuyd University of Applied Sciences
- Dr. Marcel van der Klink | Zuyd University of Applied Sciences
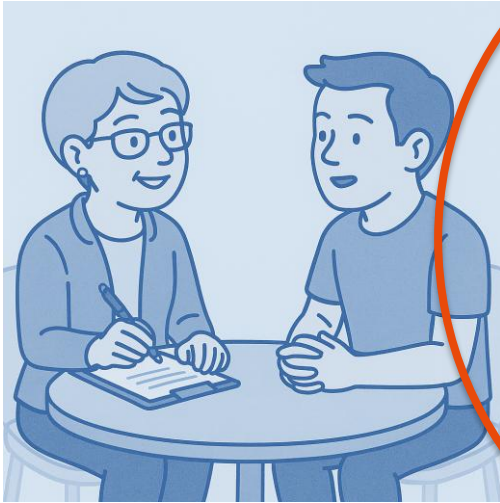- Prof. Dr. Saskia Brand-Gruwel | Maastricht University

Why investigate evaluation of initial study choice?

32%

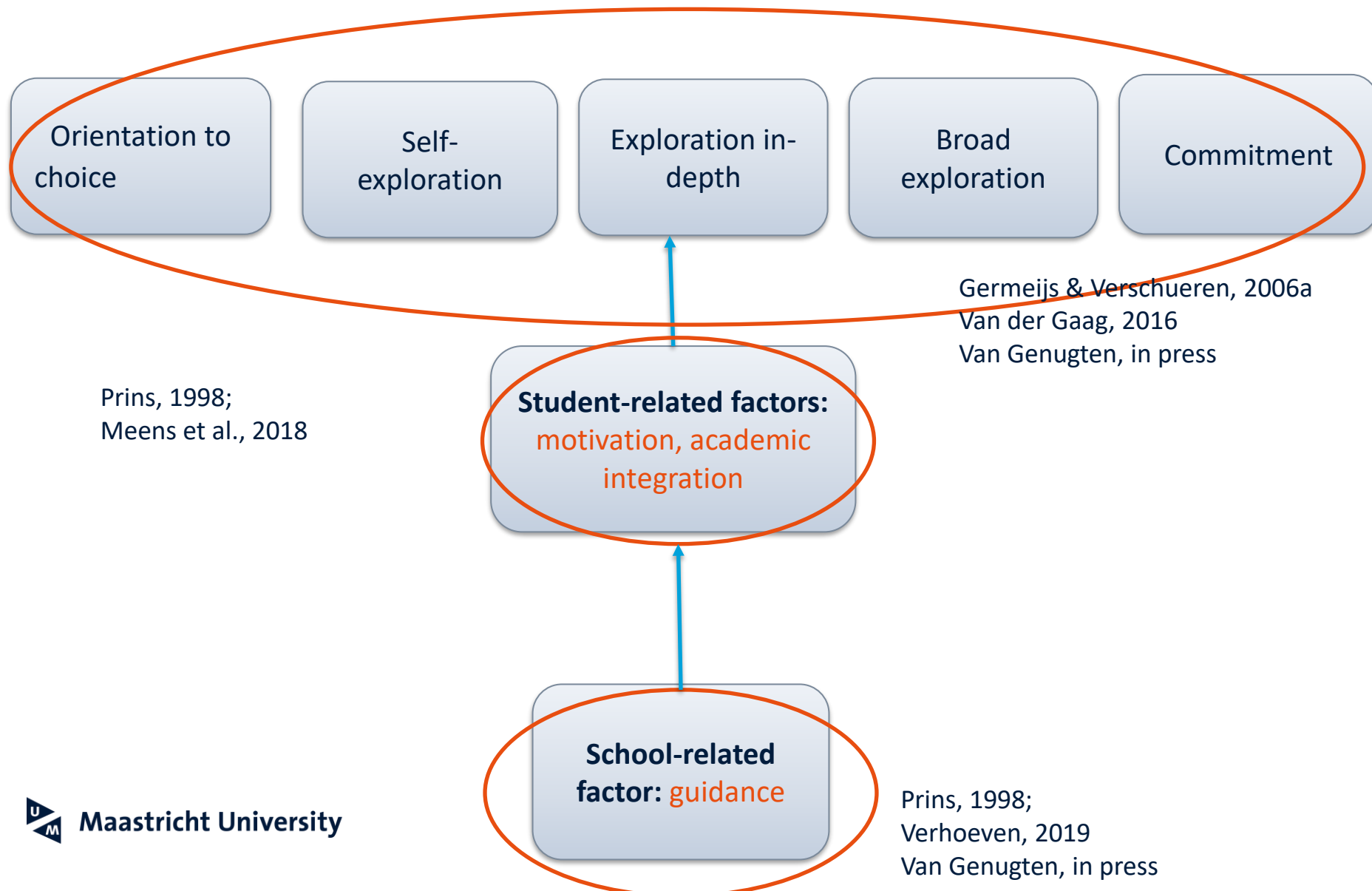# My PhD project

Study 1

Study 2/3

Study 4

Theoretical background

- Study choice = identity formation = not a one-off event → identity formation continues (Marcia, 1966, Germeijs & Verschueren, 2006)

- Takes place in the context of transition (Tinto, 1993; Bean, 1985) in which student interacts with learning environment (Eccles & Wigfield, 2005; Pascarella & Terenzini, 2005, Lent et al., 1994) - commitments

- Transition as **becoming** (Holmegaard, 2014, 2015) → (Re)evaluation or reconsideration of choices (Klimstra et al., 2012; Pop et al., 2016)

- Pre-enrolment choice: high quality choices have better outcomes (Germeijs & Verschueren, 2006; Meens, 2017)

- A lot is known about study choice before enrollment , however….

The present study: theoretical model

| Orientation to choice | Self-exploration | Exploration in-depth | Broad exploration | Commitment |

Germeijs & Verschueren, 2006a
Van der Gaag, 2016
Van Genugten, in press

Prins, 1998;
Meens et al., 2018

Student-related factors: motivation, academic integration

School-related factor: guidance

Prins, 1998;
Verhoeven, 2019
Van Genugten, in press

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Research questions

RQ1. Do first-year students engage in decisional tasks associated with evaluation of study choice?

RQ2. What are the associations between the decisional tasks and what is the effect of student-related and school-related factors?

Method

- Quantitative: SEM to test relations between decisional tasks and influencing factors in 1 model

- 301 first-year students from a Dutch UAS

- Demographics comparable with full cohort

- Data collection in January 2024 (February = drop-out moment)

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Validated instruments (α in sample)

- Decisional tasks:
  - ✓ 5 subscales from the Shortened Study Choice Task Inventory (Demulder, 2019; α = .72–.84)

- Student-related factors:
  - ✓ Motivation (Monitor Beleidsmaatregelen; α = .89).
  - ✓ Academic integration (Resch et al., 2021; α = .76)

- School-related factor:
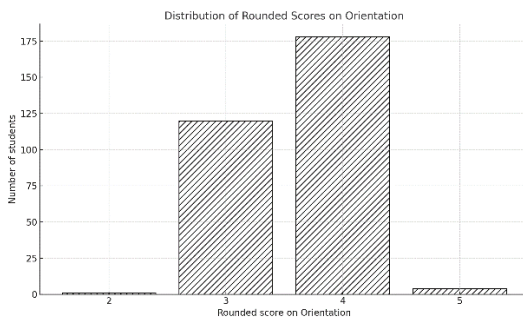 - ✓ Guidance (Prins, 1998; α = .66)

Analytical Approach

- **Preliminary checks, missing data**

- **Measurement model**: CFA showed good model fit (CFI = .93, RMSEA = .041, SRMR = .066)

- **Structural model**: SEM showed good model fit (CFI = 0.93, RMSEA = 0.041, SRMR = 0.065)
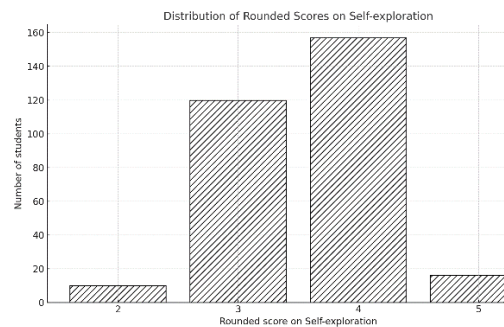
Main findings

RQ1. Do first-year students engage in decisional tasks associated with evaluation of study choice?
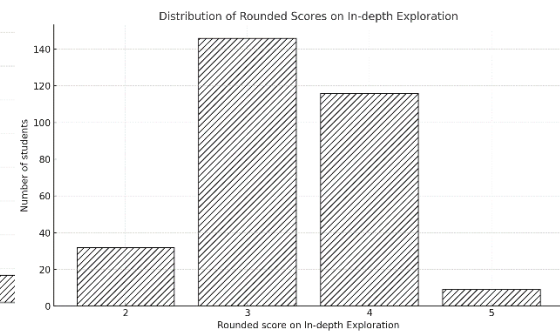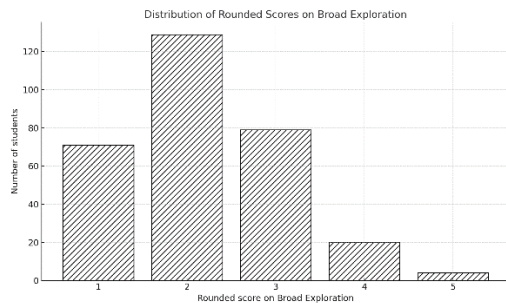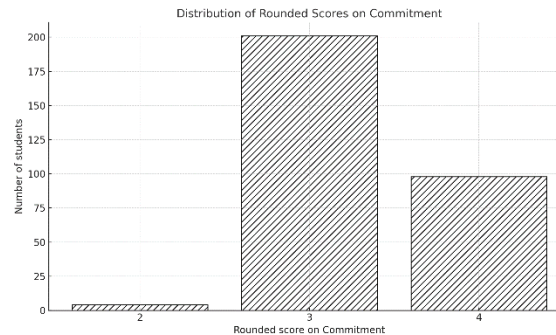
Orientation

Self-exploration

Exploration in-depth

Broad exploration

Commitment

	M	SD
Orientation	3.58	0.42
Self-exploration	3.55	0.60
In-depth exploration	3.33	0.62
Broad exploration	2.22	0.88
Commitment	3.29	0.29

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Findings

RQ2. What are the associations between the decisional tasks (H1) and what is the effect of student-related (H2) and school-related factors (H3) ?

H1. All decisional tasks are positively associated, except for broad exploration and commitment, which are negatively associated.
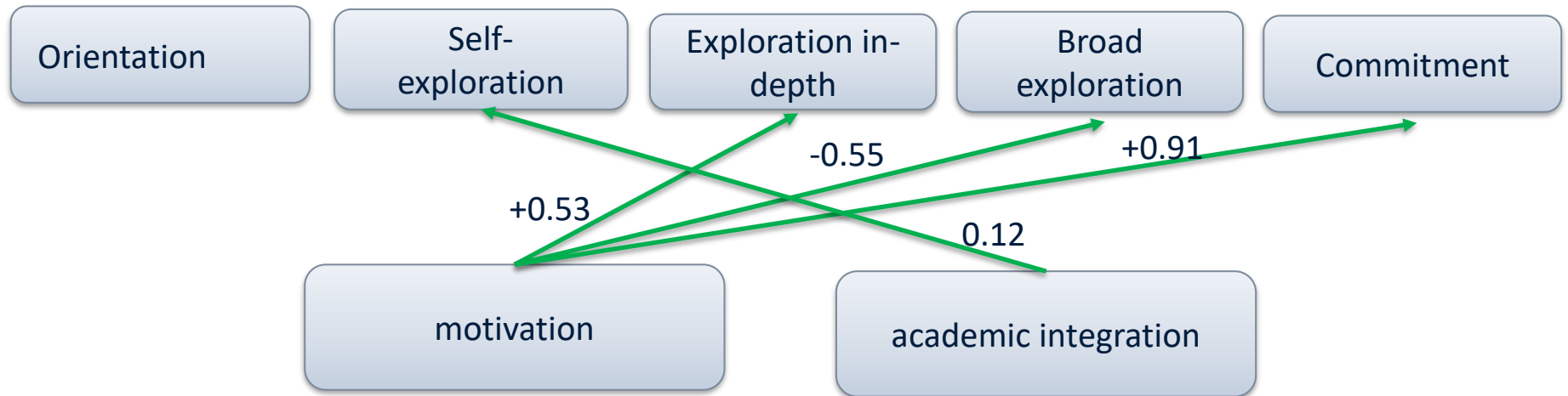
✓ Partly confirmed
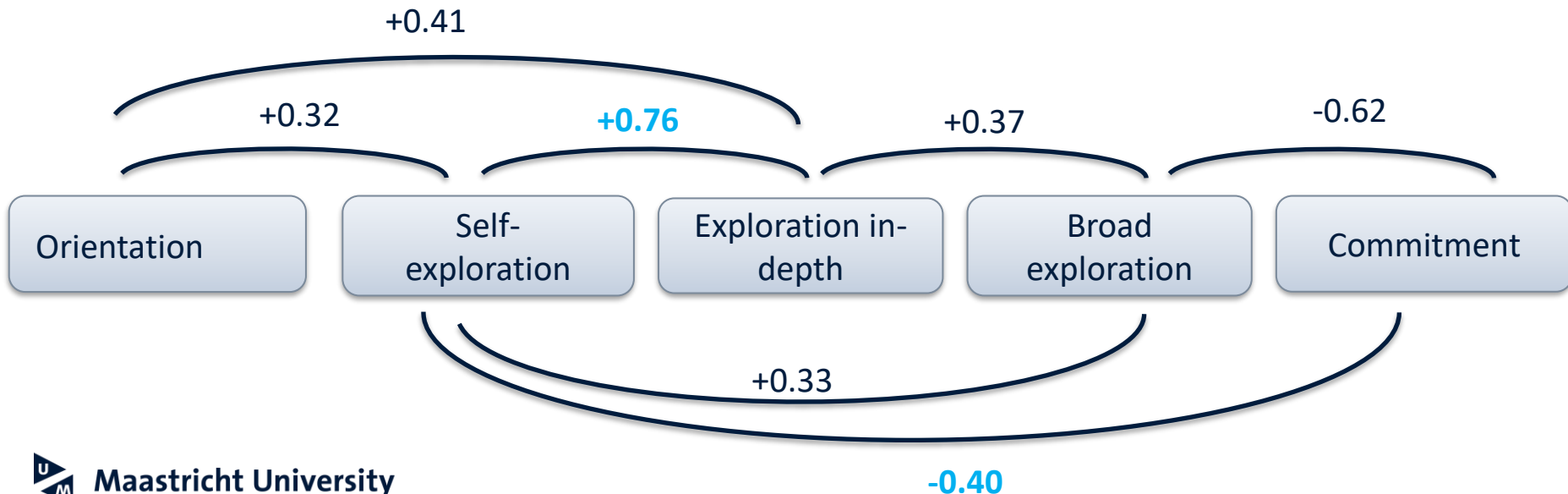
Findings

H2. There is a positive direct effect from motivation and academic integration on the decisional tasks

✓ Partly confirmed

| Orientation | Self-exploration | Exploration in-depth | Broad exploration | Commitment |

-0.55   +0.91

+0.53   0.12

motivation   academic integration
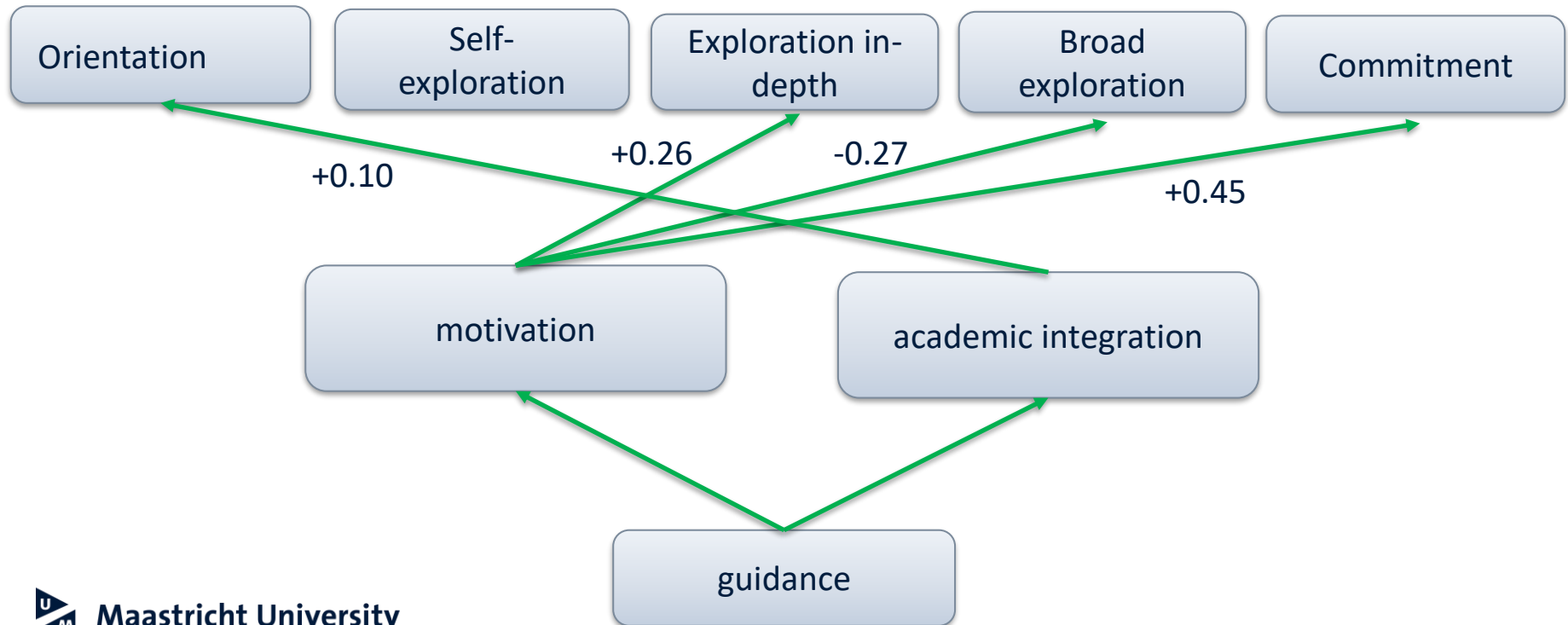
Findings

H3. There is a positive <u>indirect</u> effect from guidance on the decisional tasks, via motivation and academic integration

Partly confirmed

Preliminary discussion points

- ✓ We observed all decisional tasks in the first year, but ….

- ✓ No associations between orientation, broad exploration and commitment

- ✓ High correlation between self-exploration and in-depth exploration

- ✓ Positive effect of motivation **only** on In-depth exploration and Commitment, negative on Broad exploration

- ✓ The effect of guidance mediated through motivation **only** on decisional tasks

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Recommendations for further research

- ✓ Into subgroups to identify patterns of decisional tasks, i.e. students at risk of dropout

- ✓ Are self-exploration and in-depth exploration more intertwined in the first year than before enrolment?

- ✓ Do high quality evaluation processes lead to better decisions in the first year?

- ✓ SEM = analysis at group level. Individual patterns may be worth studying

Recommendations for practice

✓ An evaluation process exists in the first year

✓ Guidance should focus on the evaluation process

✓ And in particular on enhancing in-depth exploration, broad exploration and commitment

✓ Which means…..

✓ So all students can have high quality explorations, leading to strong and well-informed commitments with the initial choice or with a new choice

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Limitations

✓ Cross-sectional design.

✓ SEM = Analysis at group level. Individual differences not explored

✓ Context: one UAS in NL, external validity?

Thank you

Questions?

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Hu and Bentler (1999: "a cutoff value close to 0.95 for (…) CFI (…); a cutoff value close to 0.08 for SRMR; and a cutoff value close to .06 for RMSEA are needed before we can conclude that there is a relatively good fit between the hypothesized model and the observed data" (p. 1).