# Future Work Selves: Navigating Career Development

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# Hello!

*I am* **Anne-Kathrin Kleine**

**My research interests:**

- Career construction
- AI in healthcare
- Open Science
- R programming

# 1 — Past research

# Exploring predictors of AI chatbot usage intensity among students: Within- and between-person relationships based on the technology acceptance model☆

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## ARTICLE INFO

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Perceived usefulness
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Usage intensity
Multilevel structural equation modeling

## ABSTRACT

The current research investigated the factors associated with the intensity of AI chatbot usage among university students, applying the Technology Acceptance Model (TAM) and its extended version, TAM3. A daily diary study over five days was conducted among university students, distinguishing between inter-individual (between-person) and intra-individual (within-person) variations. Multilevel structural equation modeling (SEM) was used to analyze the data. In Study 1 ($N = 72$), results indicated that AI chatbot anxiety was associated with perceived ease of use (PEOU) and perceived usefulness (PU), which serially mediated the link with AI chatbot usage intensity. Study 2 ($N = 153$) supported these findings and further explored the roles of facilitating conditions and subjective norm as additional predictors of PEOU and PU. Results from both studies demonstrated that, at the between-person level, students with higher average levels of PEOU and PU reported more intensive AI chatbot usage. In Study 1, the relationship between PEOU and usage intensity was mediated through PU at the within-person level, while the mediation model was not supported in Study 2. Post-hoc comparisons highlighted much higher variability in PEOU and PU in Study 1 compared to Study 2. The results have practical implications for enhancing AI chatbot adoption in educational settings. Emphasizing user-friendly interfaces, reducing AI-related anxiety, providing robust technical support, and leveraging peer influence may enhance the usage intensity of AI chatbots. This study underscores the necessity of considering both stable individual differences and dynamic daily influences to better understand AI chatbot usage patterns among students.

# 2 Career construction theory
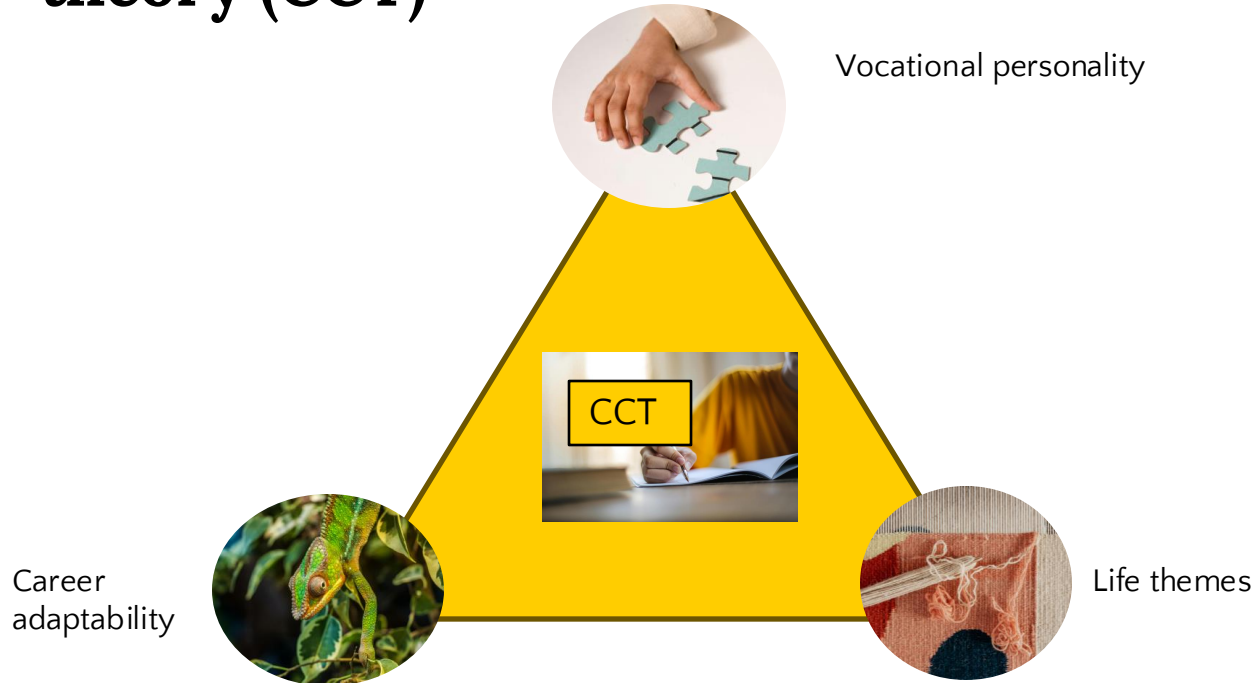
# Career construction theory (CCT)



CCT views life as an evolving **story**. Individuals write their **script**, using past experiences to inform future aspirations.

What individuals do is based in part upon their (why) life themes as well as their (how) adapt–"abilities."

*(Del Corso, & Rehfuss, 2011; Savickas, 1997; Savickas, 2005; Savickas, 2013).*

# Career construction theory (CCT)



Vocational personality

CCT

Career adaptability

Life themes

# Career construction theory (CCT)



Vocational personality

CCT

Career adaptability

Life themes

# CCT - Vocational Personality



**Vocational Personality** refers to the unique combination of interests and talents, guiding the direction of career paths.

# CCT - Vocational Personality



| INFP 'The Idealist' | INFJ 'The Protector' | ENFJ 'The Giver' | ENTP 'The Visionary' |
|---|---|---|---|
| INTJ 'The Scientist' | ISTJ 'The Duty Fulfiller' | ENFP 'The Inspirer' | ENTJ 'The Executive' |
| ISFP 'The Artist' | INTP 'The Thinker' | ESFJ 'The Caregiver' | ESFP 'The Performer' |
| ISFJ 'The Nurturer' | ISTP 'The Mechanic' | ESTP 'The Doer' | ESTJ 'The Guardian' |

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# Career construction theory (CCT)



Vocational personality

CCT

Career adaptability

Life themes

# CCT – Career Adaptability



Career Adaptability is the readiness to cope with changing work environments. It involves **curiosity, control, confidence,** and **concern** for one's career.

# CCT – Career Adaptability

## Concern

- Planning
- Prepare and anticipate career changes

## Control

- Taking responsibility
- Making deliberate decisions

## Curiosity

- Exploring possible selves

## Confidence

- Belief in ability to accomplish career-related tasks

# Career construction theory (CCT)

Vocational personality

CCT

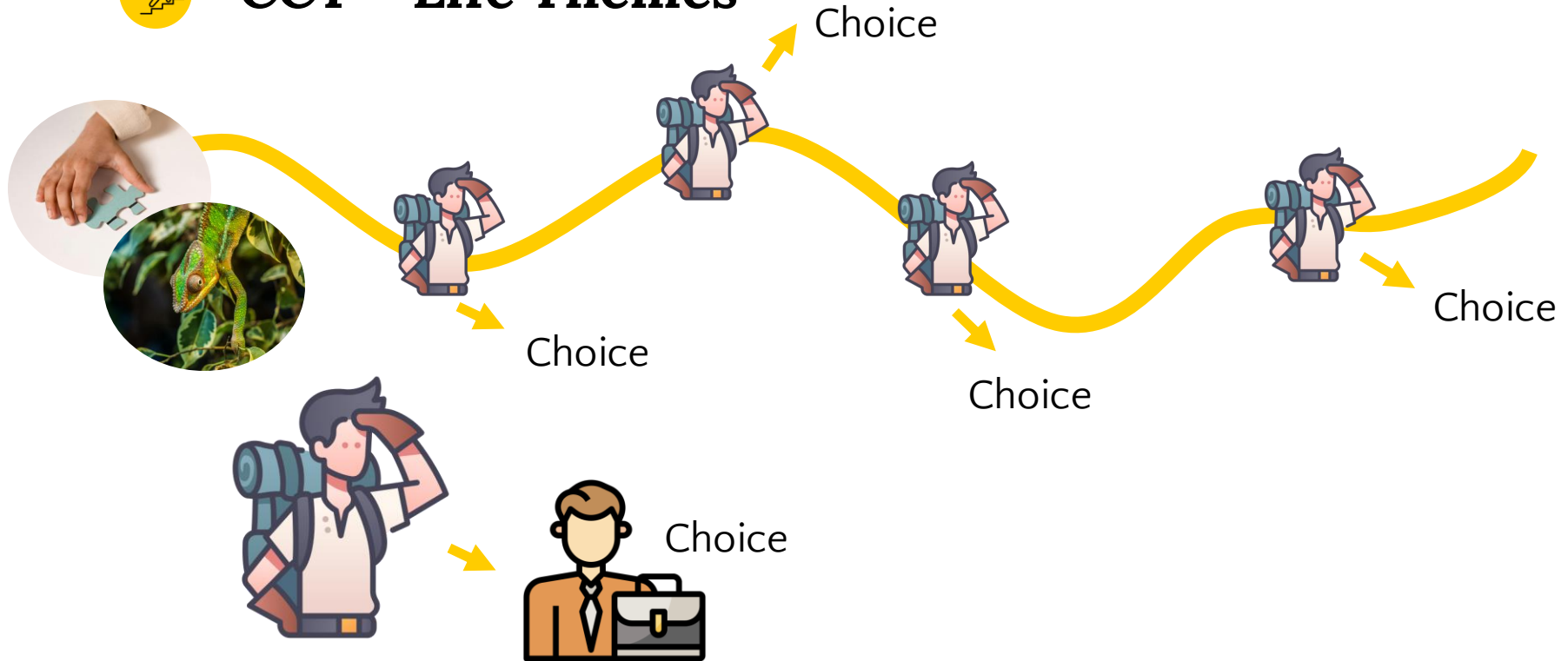Life themes

Career adaptability

# CCT – Life Themes

Life Themes connect career choices to personal stories and values, providing meaning and purpose in the professional journey.
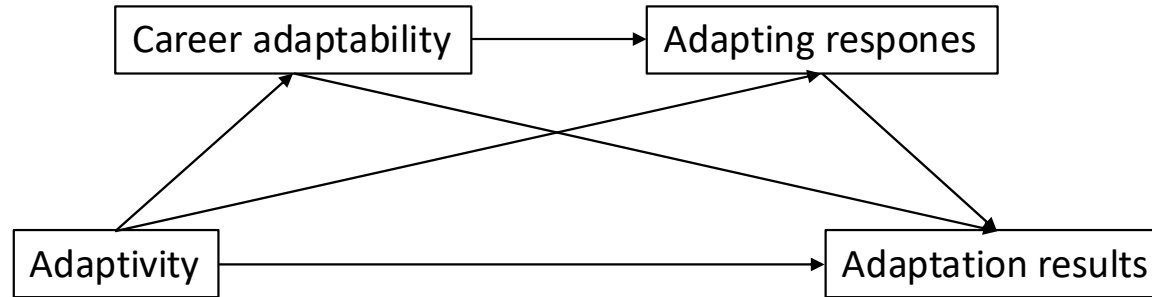
# CCT – Life Themes

Choice

Choice

Choice

Choice

Choice
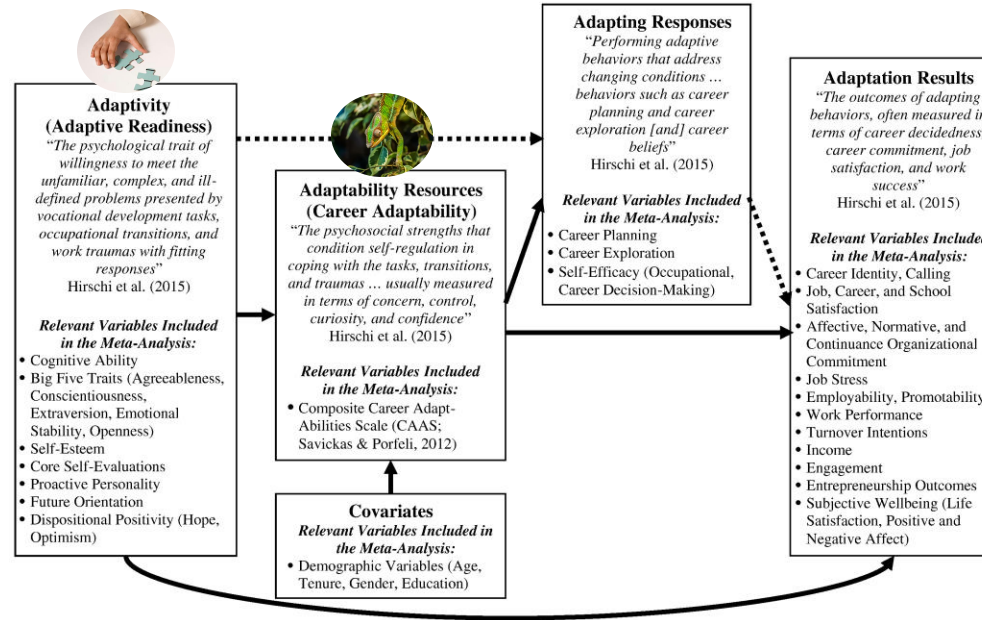
# Career construction model of adaptation

3

# Career construction model of adaptation



*(Rudolph et al., 2017; Savickas, 2013; Savickas et al., 2018).*

# Career construction model of adaptation



**Adaptivity (Adaptive Readiness)**
"The psychological trait of willingness to meet the unfamiliar, complex, and ill-defined problems presented by vocational development tasks, occupational transitions, and work traumas with fitting responses"
Hirschi et al. (2015)

*Relevant Variables Included in the Meta-Analysis:*
- Cognitive Ability
- Big Five Traits (Agreeableness, Conscientiousness, Extraversion, Emotional Stability, Openness)
- Self-Esteem
- Core Self-Evaluations
- Proactive Personality
- Future Orientation
- Dispositional Positivity (Hope, Optimism)

**Adaptability Resources (Career Adaptability)**
"The psychosocial strengths that condition self-regulation in coping with the tasks, transitions, and traumas ... usually measured in terms of concern, control, curiosity, and confidence"
Hirschi et al. (2015)

*Relevant Variables Included in the Meta-Analysis:*
- Composite Career Adapt-Abilities Scale (CAAS; Savickas & Porfeli, 2012)

**Adapting Responses**
"Performing adaptive behaviors that address changing conditions ... behaviors such as career planning and career exploration [and] career beliefs"
Hirschi et al. (2015)

*Relevant Variables Included in the Meta-Analysis:*
- Career Planning
- Career Exploration
- Self-Efficacy (Occupational, Career Decision-Making)

**Adaptation Results**
"The outcomes of adapting behaviors, often measured in terms of career decidedness, career commitment, job satisfaction, and work success"
Hirschi et al. (2015)

*Relevant Variables Included in the Meta-Analysis:*
- Career Identity, Calling
- Job, Career, and School Satisfaction
- Affective, Normative, and Continuance Organizational Commitment
- Job Stress
- Employability, Promotability
- Work Performance
- Turnover Intentions
- Income
- Engagement
- Entrepreneurship Outcomes
- Subjective Wellbeing (Life Satisfaction, Positive and Negative Affect)

**Covariates**
*Relevant Variables Included in the Meta-Analysis:*
- Demographic Variables (Age, Tenure, Gender, Education)

*(Rudolph et al., 2017).*

19

# **Future work self salience**
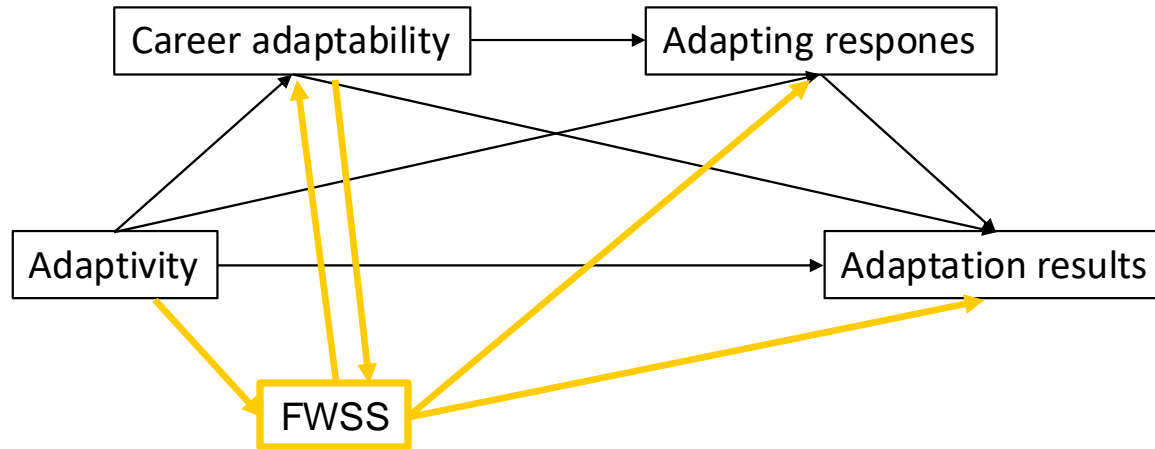
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# Future Work Self salience (FWSS)



FWSS is about how vividly individuals envision their future professional roles.

A highly salient future work self can enhance motivation and drive.

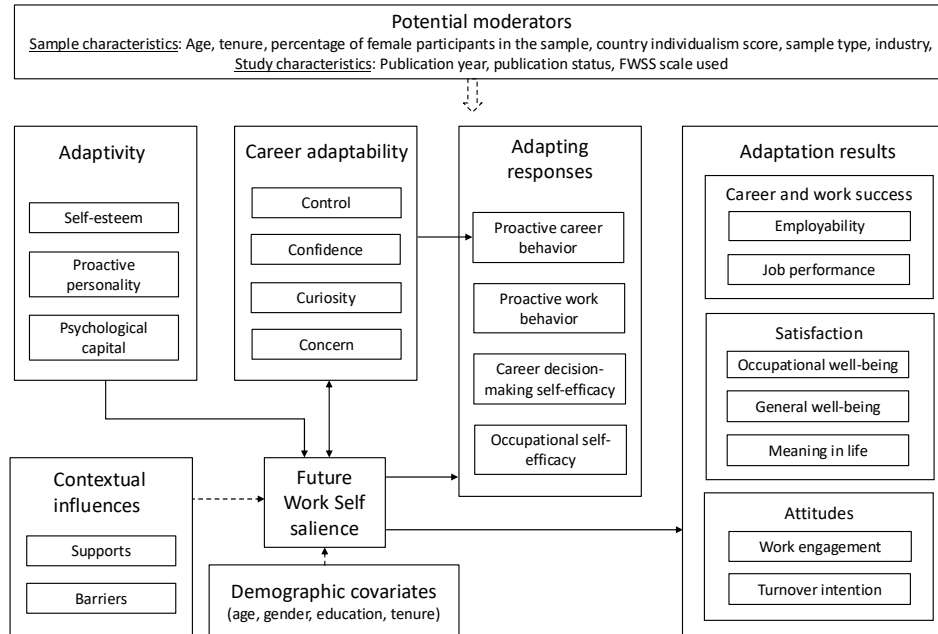*"I can easily imagine what my ideal job will be like in the future."*

(Strauss et al., 2012).

# FWSS meta-analysis

# FWSS meta-analysis

**Key questions:**

- Can the career construction model of adaptation be applied to explain FWSS relationships?
- Does FWSS explain variance in Proactive Career Behaviors (Adapting Responses) beyond other established variables (career adaptability, proactive personality)?
- Does career adaptability mediate the relationship between FWSS and Proactive Career Behaviors?

# FWSS meta-analysis



| Potential moderators |
| --- |
| Sample characteristics: Age, tenure, percentage of female participants in the sample, country individualism score, sample type, industry, Study characteristics: Publication year, publication status, FWSS scale used |

**Adaptivity**
- Self-esteem
- Proactive personality
- Psychological capital

**Career adaptability**
- Control
- Confidence
- Curiosity
- Concern

**Adapting responses**
- Proactive career behavior
- Proactive work behavior
- Career decision-making self-efficacy
- Occupational self-efficacy

**Adaptation results**

Career and work success
- Employability
- Job performance

Satisfaction
- Occupational well-being
- General well-being
- Meaning in life

Attitudes
- Work engagement
- Turnover intention

**Contextual influences**
- Supports
- Barriers

**Future Work Self salience**

**Demographic covariates** (age, gender, education, tenure)

Most hypotheses supported.

FWSS explains variance in Proactive Career Behaviors (PCBs) beyond career adaptability and proactive personality.

Career adaptability mediates relationship between FWSS and PCBs.
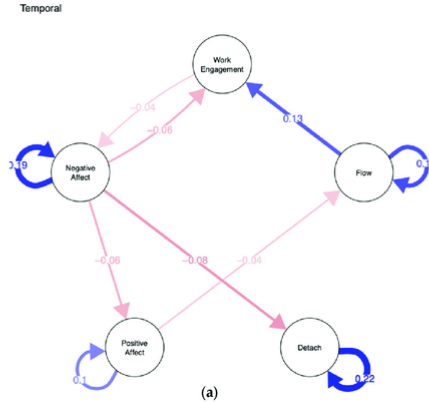
Link to preprint

# FWSS – what's next?

- Most data cross-sectional – what about temporal relationships?
- Theory and research assume unidirectional paths – what about reciprocal paths?
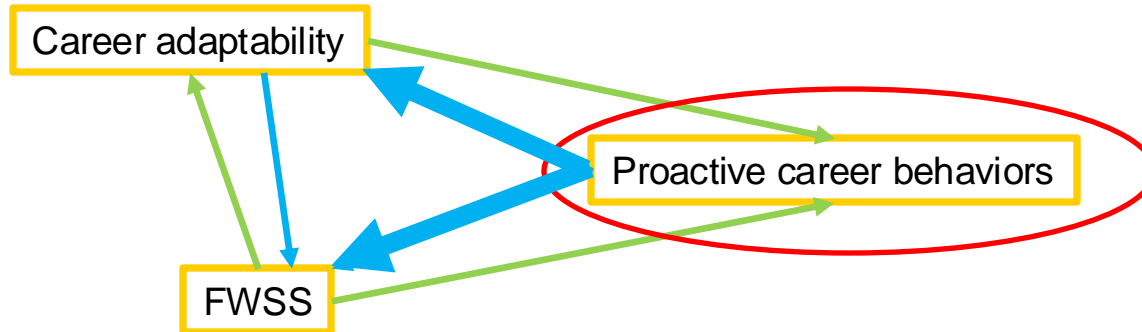
Network analysis



(Epskamp et al. et al., 2020; Schade et al., 2021).
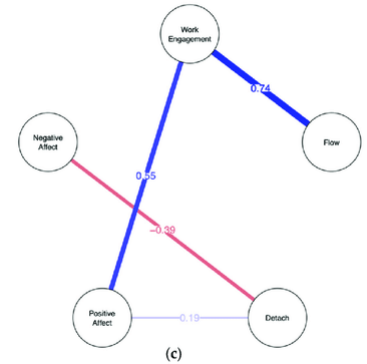
# FWSS – what's next?

- At one time point
- Over time
- Between individuals



- Identify the most influential variables in the network
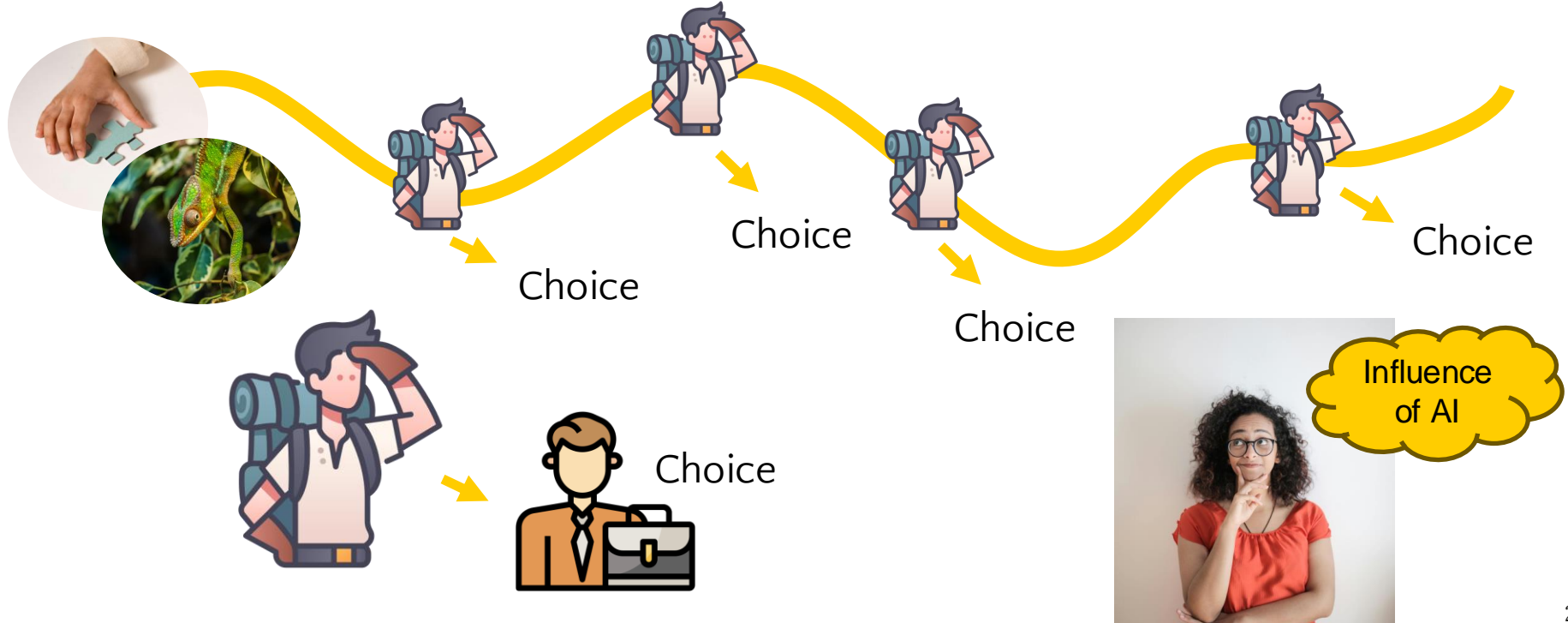
# Artificial intelligence and career development

5

# Artificial intelligence and career development



AI is transforming our perceptions of employment and employability.

*(Lin et al., 2024; Voigt & Strauss, 2024)*

# Artificial intelligence and career development

Choice

Choice

Choice

Choice

Choice

Influence of AI

# Artificial intelligence and career development



How do students adjust their career development to ensure employability in the AI era?

# Artificial intelligence and career development

What are the implications if a student's Future Work Self conflicts with concerns about how AI might impact their employability in that role?

Give up   Resist   Reevaluate   Adapt

# Artificial intelligence and career development

## Interview study with students (theory development)

- ◉ Are students aware of AI-induced changes regarding their prospective careers?
- ◉ How do they react cognitively (perceived employability)?
- ◉ How do they adjust their career development (PCBs)?
- ◉ How does interacting with AI tools influence their career development and life themes?

**6** **Open Discussion: Influence of AI on career development**

# **Open Discussion**

◉ Does AI influence your career development (cognition and behavior)? If yes, in what way?

◉ Do you feel your students perceive their employability differently because of AI? What are the influencing factors?

# Thanks!

Any **questions** ?

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