



# Success factors in apprenticeship delivery : Which factors facilitate the uptake of new skills by in-company trainers to support digital transformation in vocational education and training?

15./16. June 2023 | Joint OECD/CEDEFOP 2023 Symposium on Apprenticeships | Thessaloniki

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# Agenda

- 1 Introduction
- 2 Methodology
- 3 Findings
- 4 Recommendations and implications for management and policy makers
- 5 Limitations and future research avenues
- 6 Acknowledgements



One of my major topics is learning ability: how can one keep people sustainably employable?



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# Apprenticeships are an important lever for workforce transformation, yet digital technologies change apprenticeship training requirements and modalities



## Vocational Education and Training in Germany

Multinational company, German origin, with 3.000+ **dual apprentices** in 19 **training centres** throughout Germany.

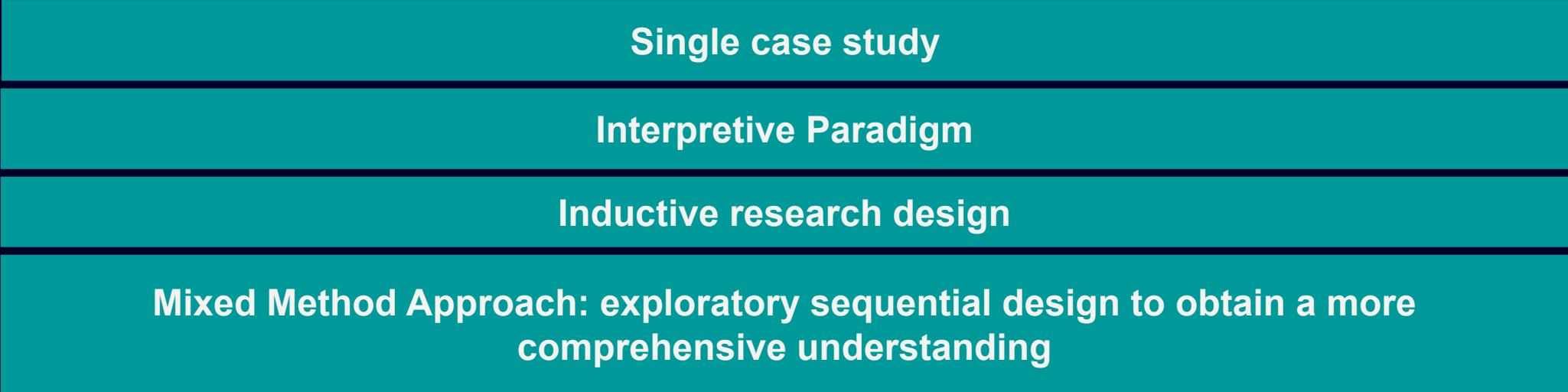
Each training centre is managed by **a local VET (= Vocational Education and Training) manager** and has **in-company trainers** who attend to the apprentices when they practice their electrical or mechanical skills (1/3 of their apprenticeship duration). Another 1/3 of their time is spent on the shop floor/in the business departments alongside their future colleagues. Another 1/3 of their time they go to vocational schools.

The VET department orchestrates the time of learning within the company.

The VET department has advanced its **methods & didactics** concept on how to include **virtual / hybrid** learning methods, more individually geared learning, new tech topics and project orientation.

Competencies of the future + new training methods + didactics → **future-proof** VET operations

# Research Paradigm and Method



**Qualitative**  
21 semi-structured interviews,  
4 different roles,  
11 locations



**Quantitative**  
online survey with  
175 participants  
(62% response rate)



**Integration**  
of qualitative and  
quantitative  
findings

# Qualitative results

## Challenges

- Digital transformation requires different VET content
- VET trainers' philosophy to evolve from conveyor of knowledge to coach
- Trainers' motivation varies
- Time to learn is scarce

## Game changers

- VET Managers acting as role models
- Managerial support
- Training methods and activities (people orientation, case study based)



### Growth Mindset

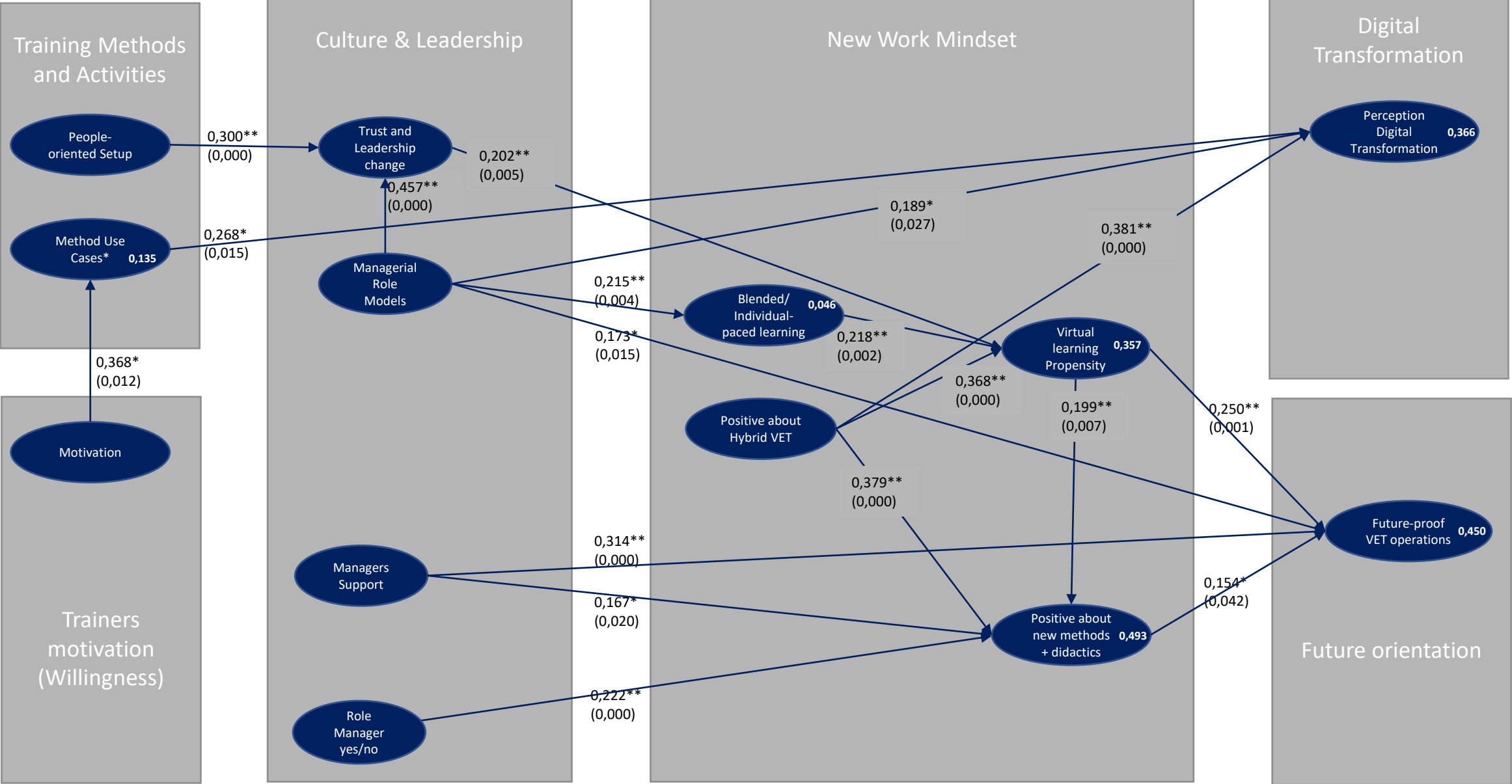
The ambition and ability to continuously develop and grow further.

## Benefits

- More freedom and flexibility in VET
- Faster implementation of new VET topics and technologies
- Future orientation of VET operations
- Employability of VET trainers

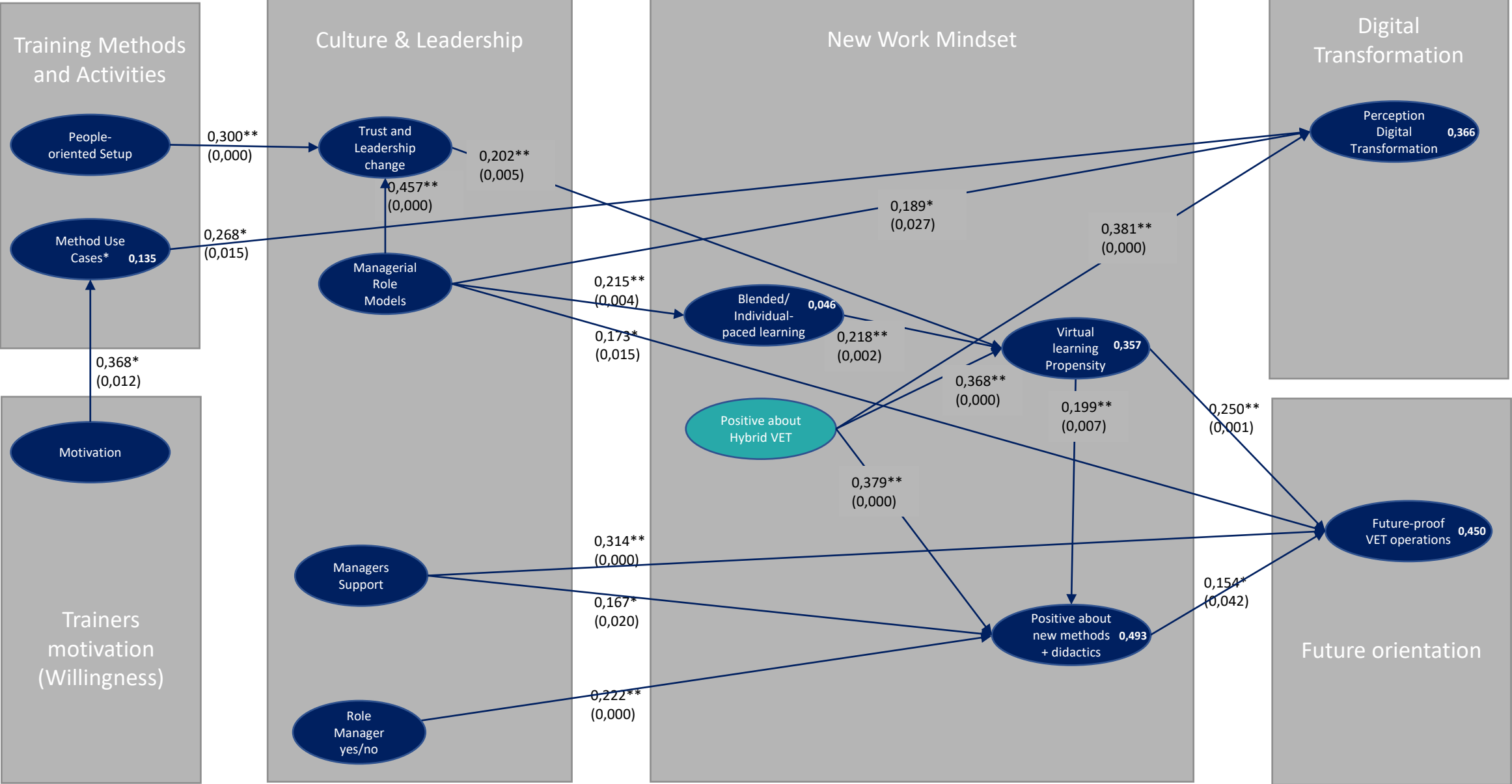
**Which factors facilitate the uptake of new skills by in-company trainers to support digital transformation in vocational education and training?**

# Quantitative Results (PLS-SEM):

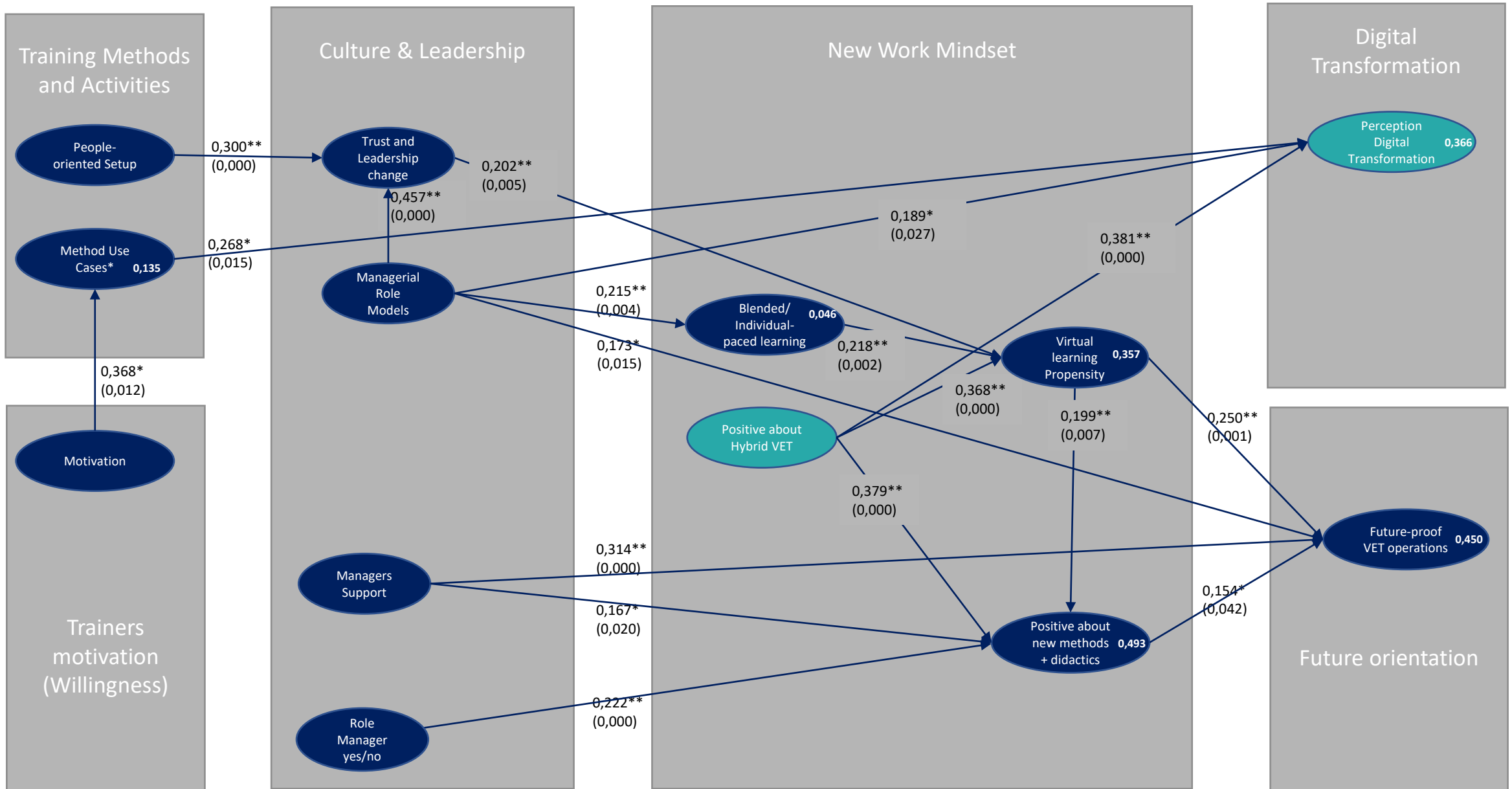




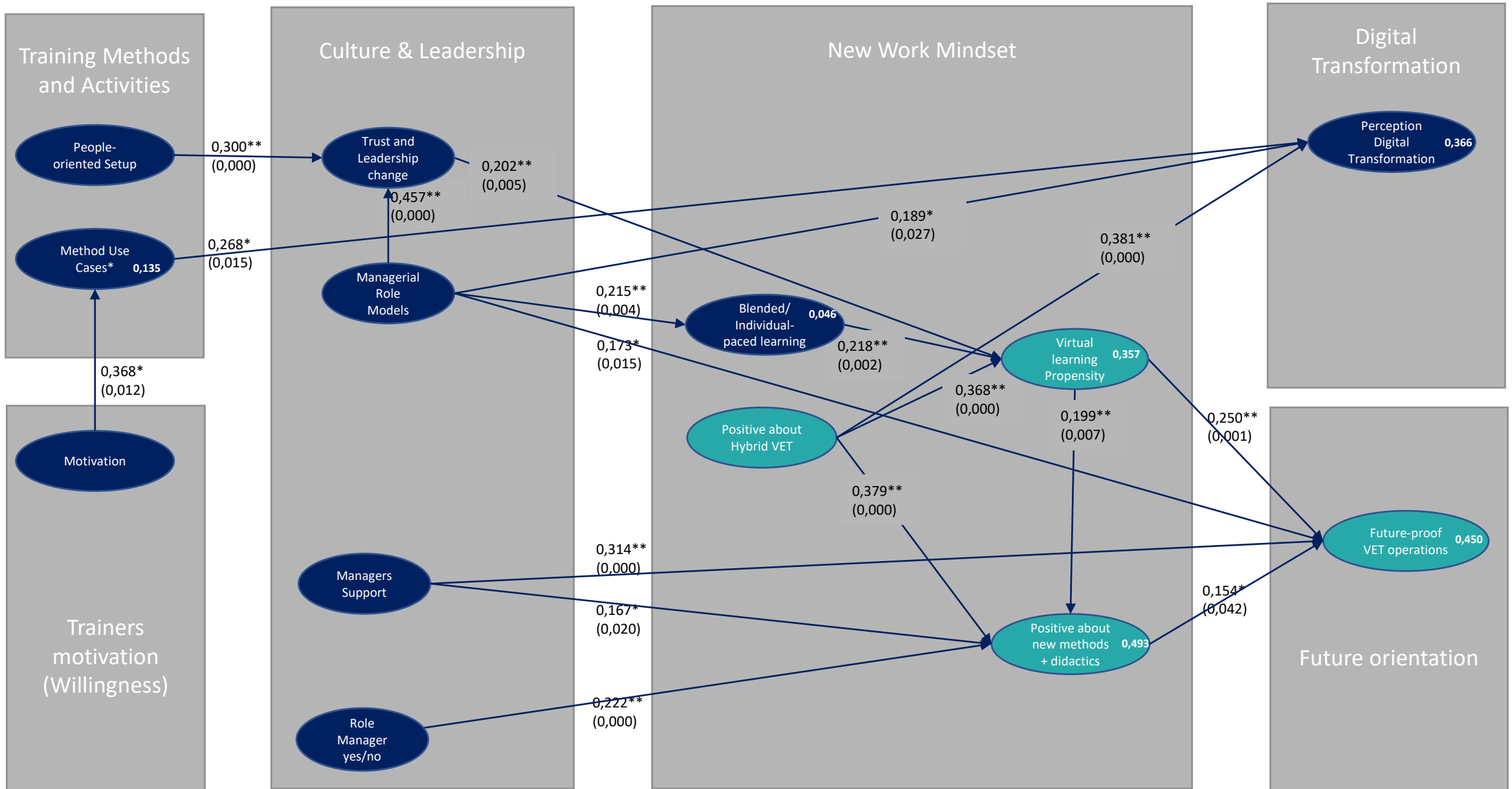
# Trainers' attitudes regarding hybrid VET cannot be influenced by management



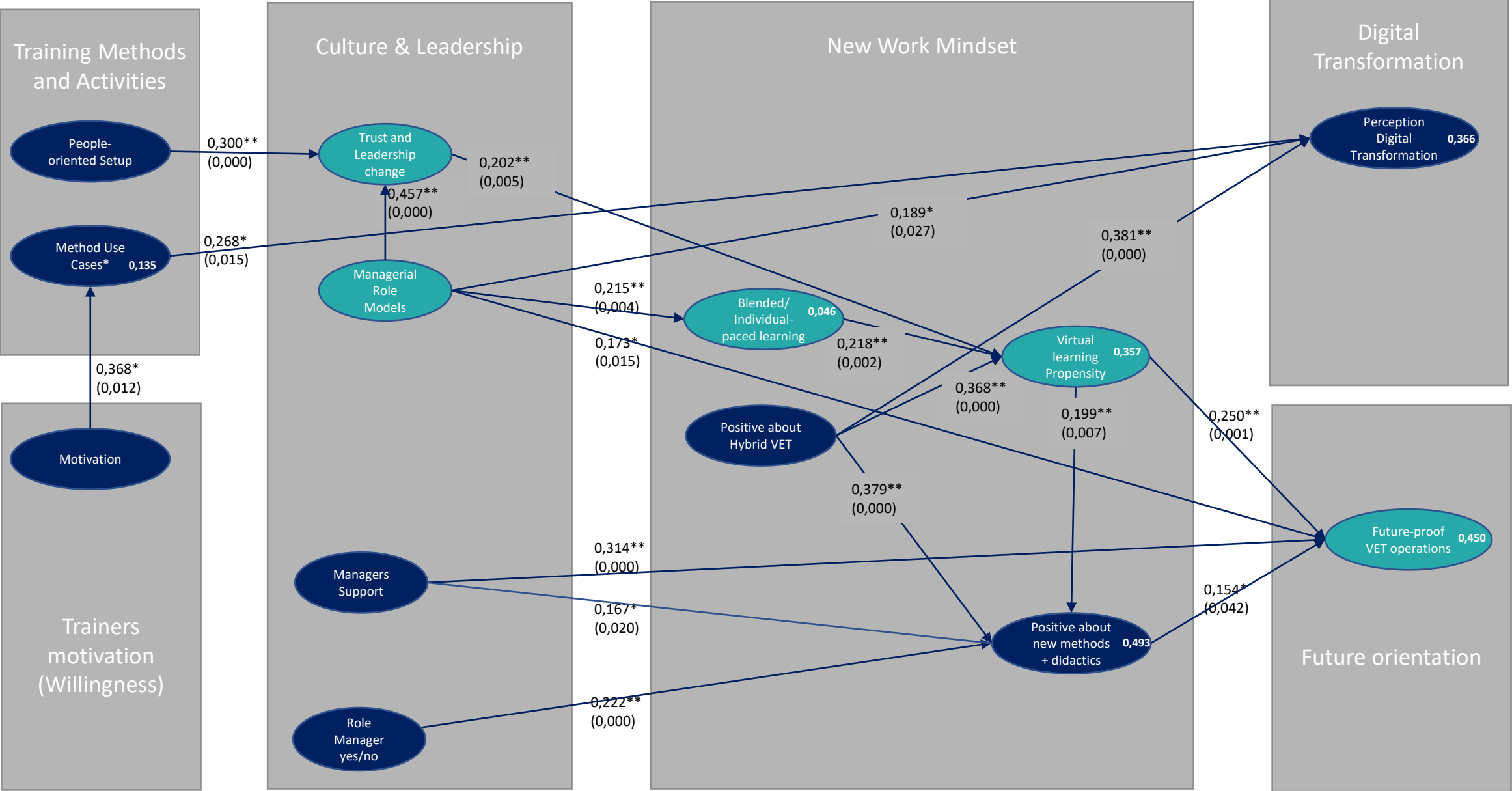
# Trainers' attitudes regarding hybrid VET influence perception of digital transformation



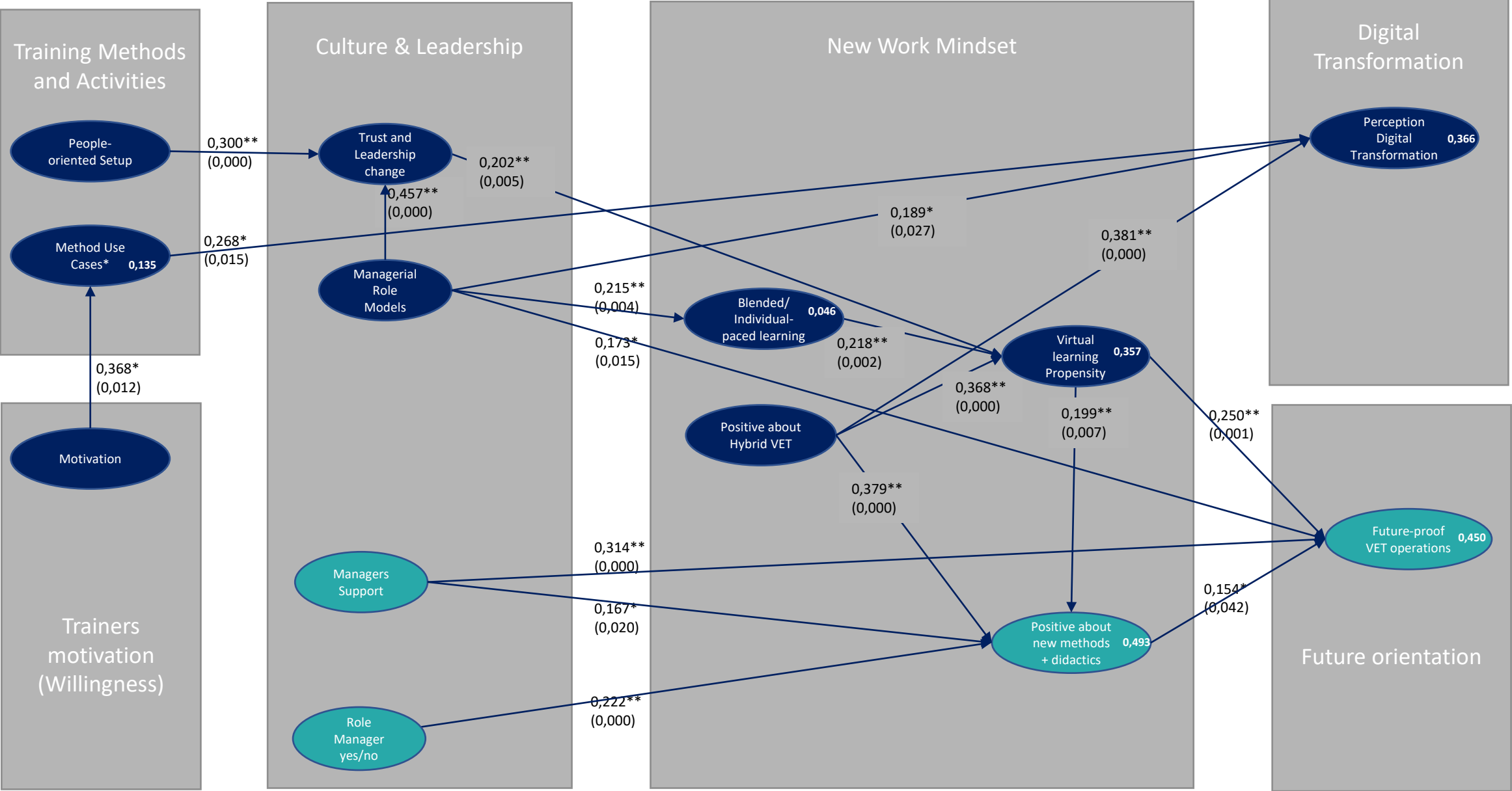
# Influence on virtual learning propensity and attitude towards new methods and didactics



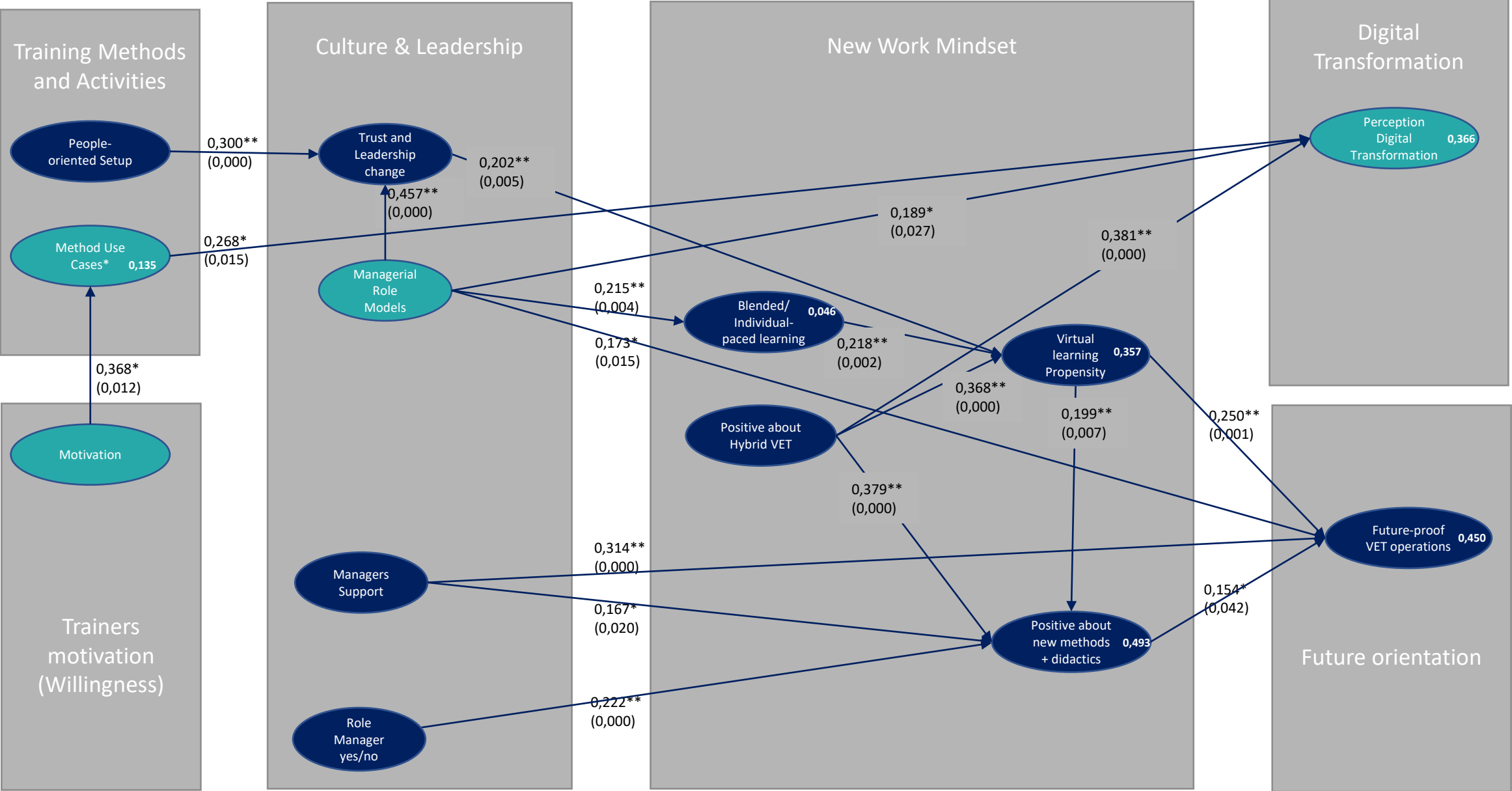
# VET managers acting as role models – and changes in trust and leadership – count



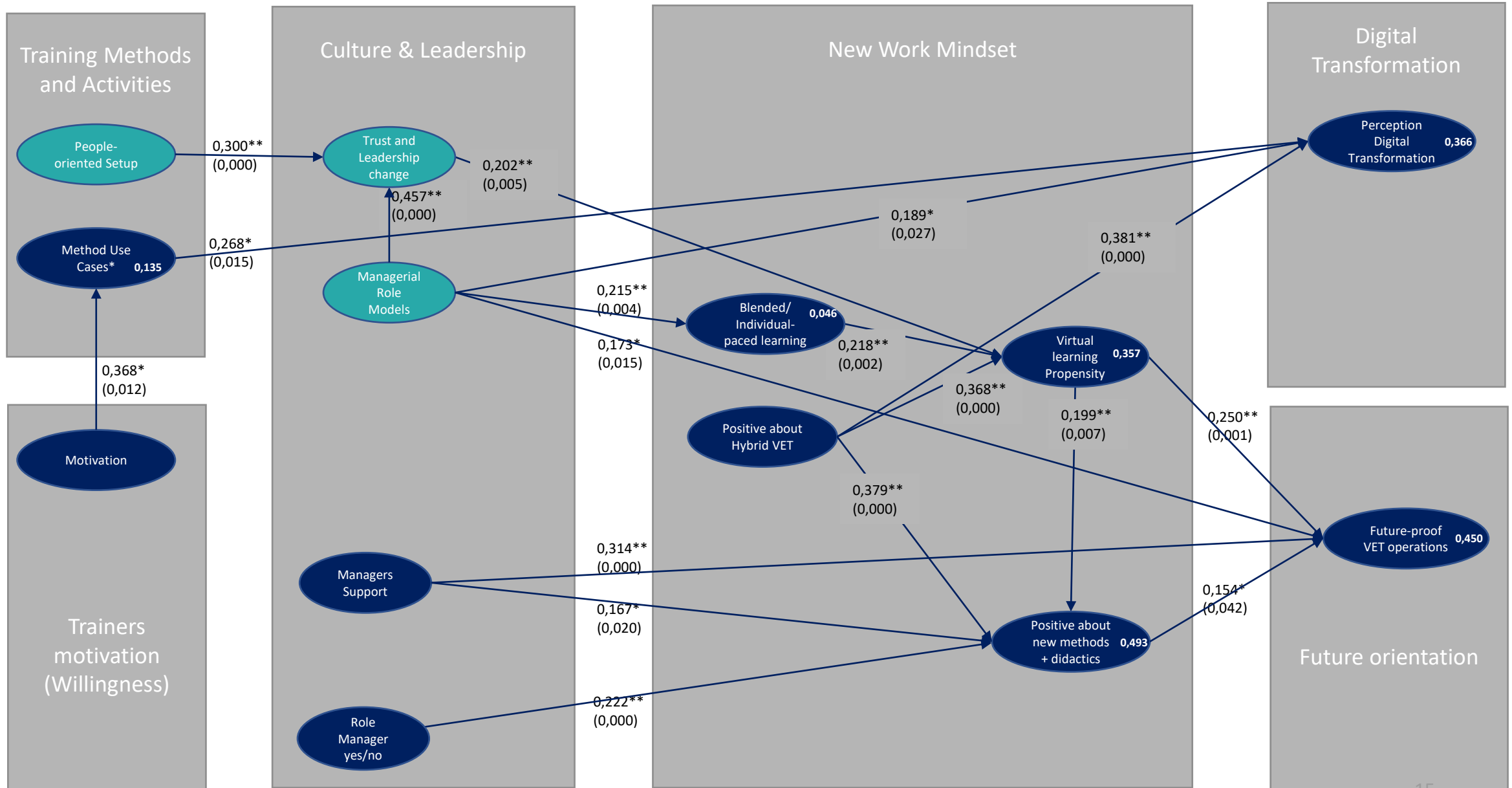
# VET managers role / support directly influences how future-proof VET operations are perceived



# Use cases for peer learning influence trainers' perception of digital transformation



# Trust and leadership change can best be proven by managerial role models acting their part



## Summary of quantitative findings

Trainers' individual attitudes regarding hybrid VET cannot be influenced by management, yet their attitudes have a direct influence on their perception of digital transformation of the VET department. Trainers' individual attitudes regarding hybrid VET influences their perception on their own virtual learning propensity and their attitude towards new methods and didactics. Ultimately, this influences on how they evaluate the future-proofness of VET operations.

VET managers acting as role models – and changes in trust and leadership - influence trainers' virtual learning propensity indirectly via trainers' blended/individually-paced learning practices.

VET managers acting as role models, and their support, directly influence how future-proof VET operations are perceived.

Similarly, VET manager's support has a direct influence on trainers' attitude towards new methods and didactics. So does the sheer fact that someone is a manager.

Motivated trainers build use cases for peer learning. This influences trainers' perception of the degree of digital transformation of the VET department, even stronger than managerial role models do.

Trust and leadership change can best be proven by managerial role models acting their part. People-oriented setups of trainings manifest such change as well.



# Recommendations for managers regarding fostering learning of corporate trainers:

Our research shows that the following factors are instrumental for facilitating the uptake of new skills by in-company trainers to support digital transformation in VET:

Therefore, managers should...



... trainers appreciate more hybrid, more virtual, more collaborative training formats to help digital transformation.

Enable virtual cooperative learning



...trainers often feel they do not have sufficient time to learn new skills.

Allow for sufficient time



... trainers' individual attitudes regarding hybrid VET cannot be influenced by management

Accept trainers' expertise & attitudes



... trainers' own virtual learning propensity can be influenced by leaders demonstrating change, trust and new learning styles.

Demonstrate trust, change and learning



... trainers' own virtual learning propensity influences the perception of the VET department's overall future orientation.

Build teams that believe in learning transformation

# Recommendations for politicians to foster learning of corporate trainers



Open, people-oriented, collaborative training opportunities to enable cooperative learning

Shape local skilling ecosystems with public and private partners and with academic as well as vocational institutions



Use role models, use cases and pilot projects to demonstrate usefulness of innovation in learning and VET

Intensify contacts with local players in the VET and upskilling market to provide opportunities for learning new skills by trainers to advance local workforce



Most trainers (and young people) are not mobile enough to seize educational opportunities outside their regional or local situation

Spanning boundaries across the divide (companies, social partners, vocational schools, academia, parents) to advocate and scale up local skilling ecosystems via digital/virtual means

## Limitations and future research avenues

- ✓ Single-case study in this specific German high-tech MNE context has its limitations as to its validity and objectivity
  - ✓ Two-step mixed-method approach in an exploratory sequential design allows to obtain a more comprehensive understanding and integration of qualitative results into quantitative ones
- ✓ Future avenues for research may therefore want to explore more cases in the VET context or explore related contexts
  - ✓ Possibly in other cultural – national or professional – contexts
  - ✓ Such as corporate upskilling and reskilling domains
  - ✓ Virtual and cooperative learning for skilled workers (blue-collar workers)

# Acknowledgements

The author wishes to thank

Prof. Anne BARTEL-RADIC Univ. Grenoble Alpes, Grenoble INP, CERAG, and  
Prof. Alain CUCCHI, Université de la Réunion, CEMOI

for their guidance and support in this research project.

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