

Assessment of the effectiveness of VET workplace learning: VET-WL factors model.

A study in the Barcelona area

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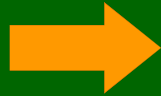
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1. INTRODUCTION

VET studies



Workplace
learning (WL)



An **effective** WL allows the students:

to **complement** the **skills** or **knowledge**
acquired in **VET** developed within the institution



to **apply** their **professional skills** to a **real**
work situation



to **acquire attitudes** and **skills** necessary for
labor insertion

2. METHODOLOGY (I)

Goals of the project:

- To describe the **situation of the WL** at this moment, and to identify the **main practices** of the WL that exist at VET institutions in Barcelona.
- To capture the **view of enterprises** about the WL, related to: **factors** that determine its **efficacy**; its **utility**; their **implication**; and, some **elements** that can be **improved**.
- To create a **tool to diagnose the efficacy** of WL.
- To **evaluate the efficacy** of WL in the Barcelona area, using the **factors** of efficacy.
- To **make suggestions** to promote a more effective WL that develops the skills that the job market requires.

Methodological approach of the project:

- **mixed**, combining quantitative and qualitative data collection and data analyses;
- and, **non-simultaneous**.

2. METHODOLOGY (II)

PHASE 1: Theoretical review

PHASE 2: 12 interviews with stakeholders

Educational system area:

-5 interviews education administrations;
-1 interview high-school tutor

Business area:

4 interviews company tutors
2 interviews Chamber de Commerce

PHASE 3:
1,026 FET-WL questionnaire for students
(previous pilot test)

Data analysis:

- ✓ Exploratory factorial analysis
- ✓ **Reliability**
- ✓ **Descriptive**
- ✓ Simple regressions
- ✓ **Multiple regressions**
- ✓ ANOVAS

2. METHODOLOGY (III)

Variables of the interviews with stakeholders:

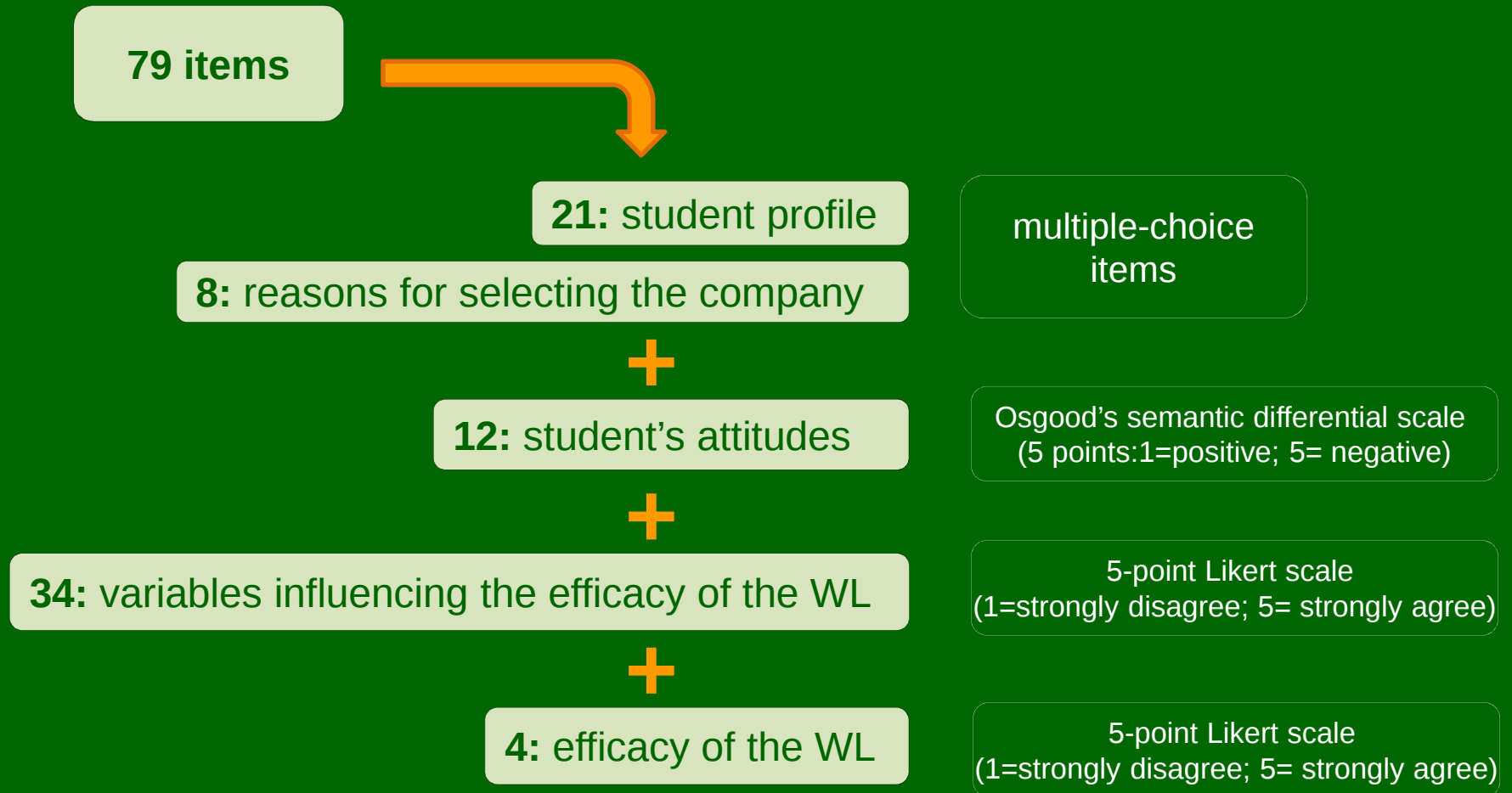
- Design of WL
- Implementation of training
- Monitoring and relationship between stakeholders
- Evaluation of the WL
- High-school tutors and coordinators of the WL
- Company tutors and coordinators of the WL
- Selection of companies and students
- Profile of students
- Utility of the WL
- Perception of satisfaction with the WL

Variables of the FET-WL questionnaire:

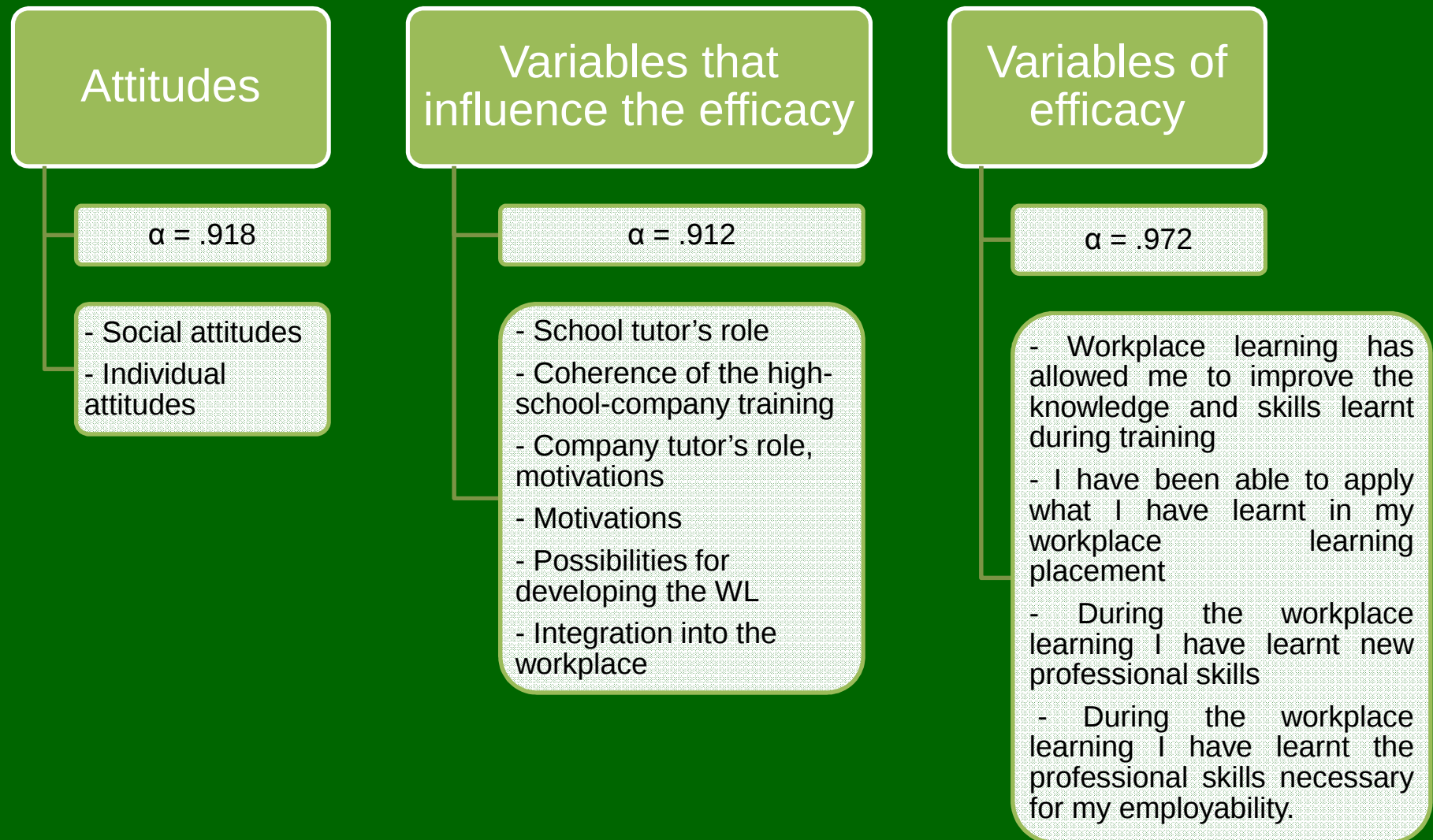
- Profile
- Selection of companies in the WL
- Attitudes
- Efficacy of WL (dependent variable)
- Previous knowledge
- Activity plan
- Tasks
- Company tutors
- High-school tutors
- Work environment
- Reasons to participate in WL
- Satisfaction

2. METHODOLOGY (IV)

FET-WL questionnaire:



3. RESULTS (I)



3. RESULTS (II)

Profile of the students in the study:

Profile variables	Students' distribution according to their responses
Sex	• Men: 540 (47,5%) • Women: 597 (52,5%)
Age	• <19 years: 394 (34,7%) • 19-20 years: 229 (20,2%) • 20 a 22 years: 306 (27%) • >22 years: 205 (18,1%)
Work experience in months	• 0 months: 468 (41,5%) • 0-3 months: 129 (11,4%) • 3-12 months: 251 (22,2%) • >12 months: 281 (24,9%)
Number of employees of the company where practices take place	• <10 employees: 373 (32,9%) • 10-49 employees: 431 (38%) • 50-250 employees: 149 (13,1%) • >250 employees: 64 (5,6%) • I don't know: 118 (10,4%)

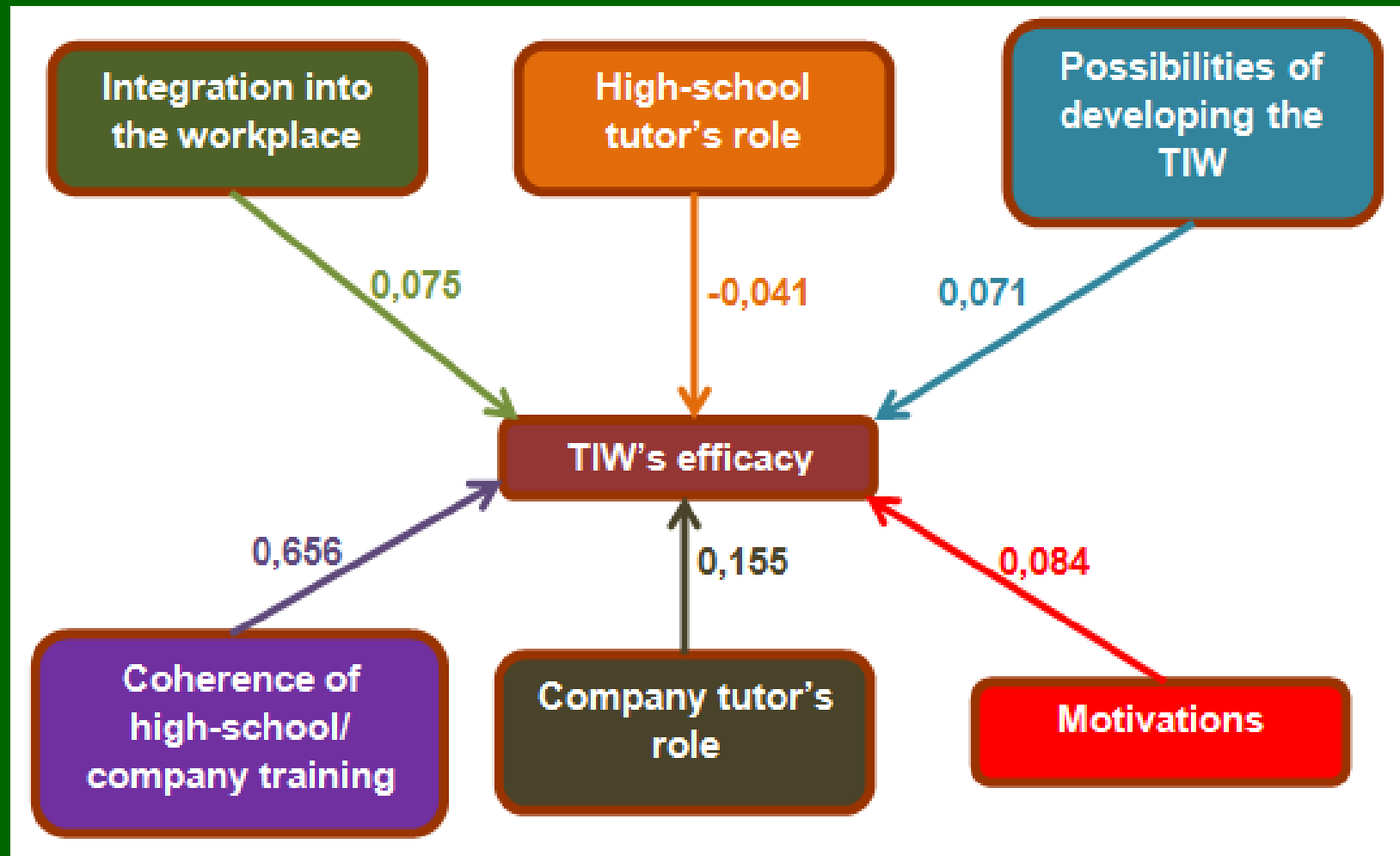
3. RESULTS (III)

Efficacy of the WL:



3. RESULTS (IV)

Model of WL's efficacy:



3. RESULTS (V)



3. RESULTS (VI)

Factors:

ATTITUDES

- In the **model of WL's efficacy** attitudes, individual and social, do not influence the efficacy (their importance is inhibited when there are other factors).

- However, it is important to note that attitudes are **higher**:

- at **concerted high-schools** than at public schools;
- at **upper grade** than at middle grade (related to age and personal maturity as well as previous work experience);
- in the case of **girls when**: there is more contact between tutors, they have better academic results, the academic situation is higher than the rest of the class, and they have less subjects failed;
- and, when the **student chooses the enterprise**.

- Students that **have never worked** evaluate more positively their individual attitudes (**excessively positive perception**).

HIGH-SCHOOL TUTOR'S ROLE

- **More appreciated** by students **without previous work experience** (role guide).

3. RESULTS (VII)

COMPANY TUTOR'S ROLE

- **More valued** for students:
- **without previous work experience**;
- of **upper grade** than middle grade (type of WL);
- and, students of **middle and little enterprises** than big companies.

MOTIVATIONS, POSSIBILITIES OF DEVELOPING WL AND INTEGRATION INTO THE WORKPLACE

- **More motivation** the students:
- **without previous work experience**;
- and, of upper grade than middle grade (maturation, challenges at WL, next to labor insertion).

COHERENCE OF THE HIGH-SCHOOL / COMPANY TRAINING

- **More valued**, if:
- students **don't have previous work experience**;
- they have **changed the enterprise** where they do the WL;
- and, they are in a **little company** than if they are in a big one.

3. RESULTS (VI)

Efficacy:

Higher efficacy if:

- students have changed **company**;
- they are **women** (also in all factors except the high-school tutor's role);
- there is **more contact between tutors**;
- they study in **concerted high-schools** than in public or private high-schools;
- they do the WL in **little companies**, more than in big ones
- and, if the have **no failed subjects**.

General results:

- **Best academic results**, more out of practice.
- To achieve a **higher efficacy level** it is necessary to **improve: weak facilitators**, specially: **coherence of the high-school / company training** and **company tutor's role**.
- **High-school tutor's role** gets lower results than *company tutor's role*.
- **Individual attitudes** can act as a barrier (although they play a minor role in the efficacy).

4. CONCLUSIONS (I)

WL's evaluation results: efficacy level medium/high (3.77 on 5)

Model of WL's efficacy:

- Explained variance: **66,9%**.

6 factors:

- *coherence of the high-school / company training;*
- *company tutor's role;*
- *motivations;*
- *integration into the workplace;*
- *possibilities for developing the WL;*
- *high-school tutor's role.*

4. CONCLUSIONS (II)

COHERENCE OF HIGH-SCHOOL / COMPANY TRAINING

- β (factor weight)=.656**. Result: 3.41
- First item to **improve** in order to increase the efficacy of WL; it explains the most variance in WL's efficacy.

COMPANY TUTOR'S ROLE

- β = .155**. Result: 3.72
- It is also necessary to **improve** it to increase the efficacy of WL.

INTEGRATION INTO THE COMPANY

- β = .075**. Result: 4.19
- **Strong facilitator of** efficacy (external factor)

INDIVIDUAL ATTITUDE

- **Risk of barrier** for efficacy.
- Low impact on efficacy, it is not a priority to improve it.

* $p < 0.05$; ** $p < 0.01$

5. SOME SUGGESTIONS TO IMPROVE VET-WL

- **To improve the *coherence of high-school / company training*:** contact high-school - company.
- **To improve the *company tutor's role*:** more actions to professionalize the work of company tutors and to reward their work.
- **To increase contact between tutors:** it can bring greater *coherence of higher-school / company training* and *integration into the workplace*.
- **To change the evaluation system:** more possible results and a more committed and continuous evaluation by both tutors.
- **More support during the WL** to **students** who have **lower results**, introducing compensatory measures.
- **More attention** to the *coherence of high-school / company training* and the *company tutor's role* when the WL is done in a big company.

THANK YOU

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