Impact of the video tool on the acquisition of clinical skills in Osteopathy
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Preliminary study on 3rd year osteopathic students

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INTRODUCTION

Background

Law-decree number 2014-1505 of 12 December 2014 relating to osteopathic education

https://www.legifrance.gouv.fr/eli/decret/2014/12/12/AFSH1427626D/jo

INTRODUCTION

Leng, B. D. & al. (2007). How video cases should be used as authentic stimuli in problem-based medical education. *Medical Education*, *41*(2), 181–188.

Gillispie, V. (2016). Using the Flipped Classroom to Bridge the Gap to Generation Y. *The Ochsner Journal*, *16*(1), 32–36.

Montayre, J., & Sparks, T. (2018). As I haven't seen a T-cell, video-streaming helps. *Collegian*, *25*(5), 487–492.

INTRODUCTION

Van Selm, M., & Jankowski, N. W. (2006). Conducting Online Surveys. *Quality and Quantity*, *40*(3), 435–456.

Johnston, G. M. (2017). Innovations in Training the Next Generation of Physicians for Missouri and the Nation. *Missouri Medicine*, *114*(5), 358–362.
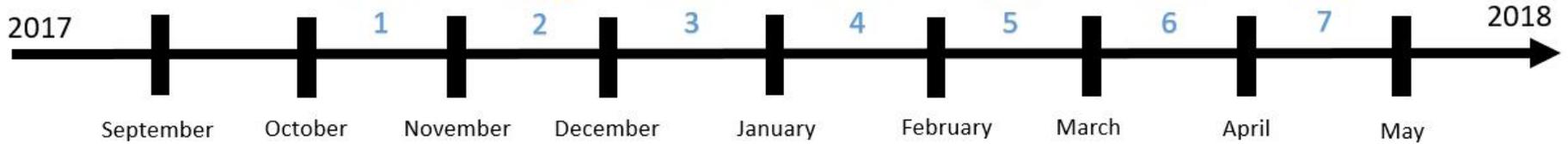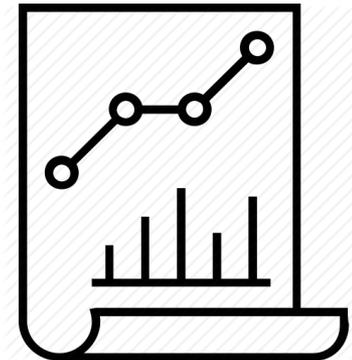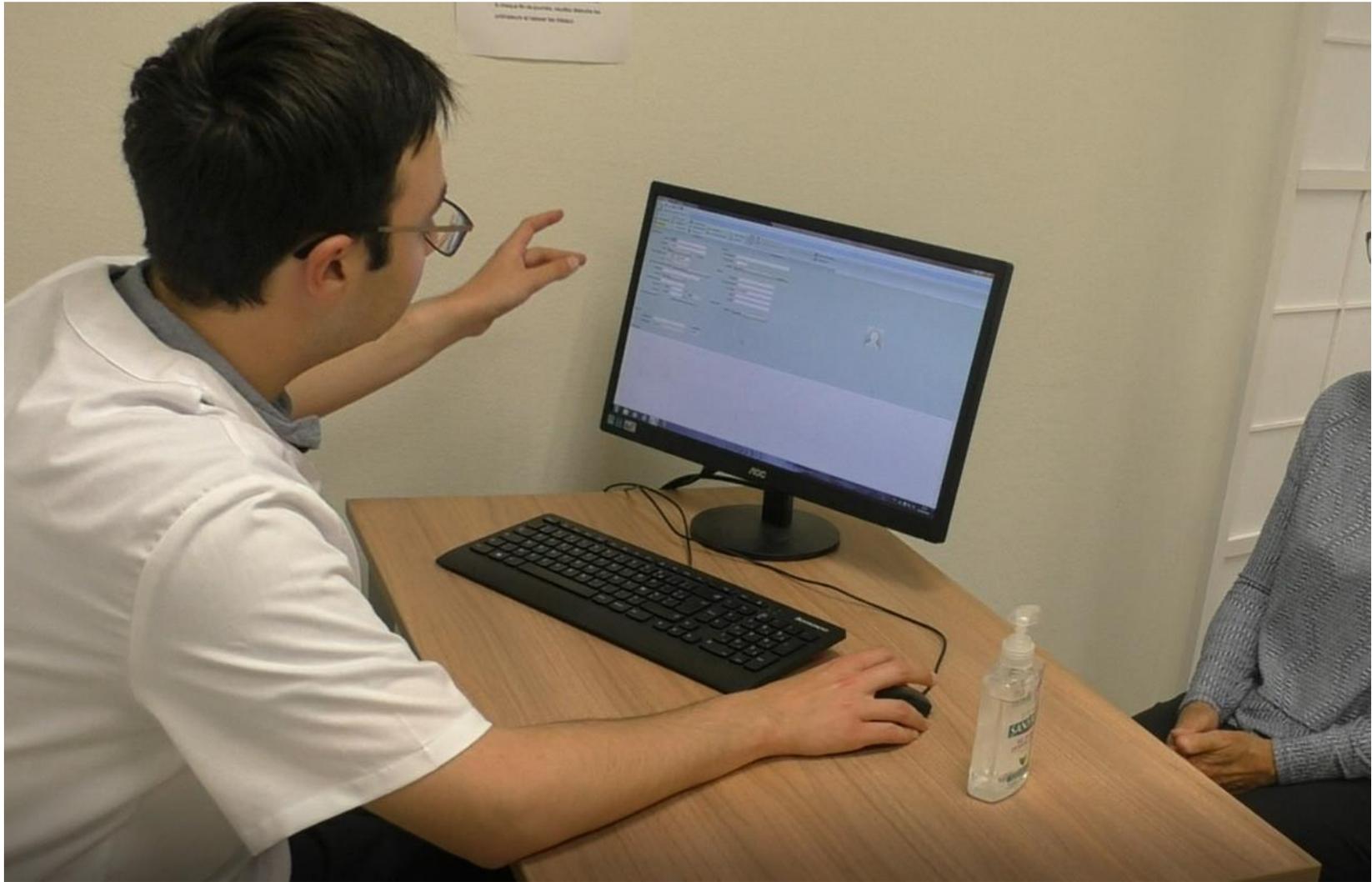
MATERIAL AND METHODS

THE 7.3 TEACHING UNIT PROJECT

MATERIAL AND METHODS

VIDEO SHOOTING

MATERIAL AND METHODS

QUESTIONS   RÉPONSES   47

UE 7.3

Le questionnaire vise à faire un premier état des lieux des compétences cliniques que vous avez pu commencer à acquérir depuis le début de votre troisième année. A partir de vos réponses, l'objectif est d'améliorer l'acquisition des compétences nécessaires à la consultation ostéopathique.
Auto-évaluez-vous de 1 à 5 à partir de vos premières expériences d'observations cliniques (1 non acquis - 3 partiellement acquis - 5 totalement acquis) :
Je suis capable de :

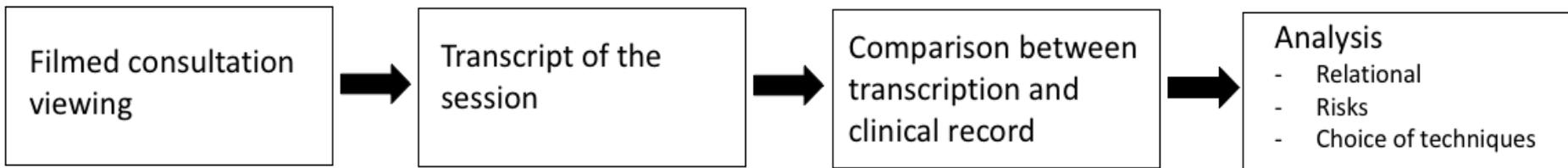Accueillir et écouter la personne et son entourage en prenant en compte la demande et son contexte   *

○ 1

○ 2

○ 3

○ 4

○ 5

CAPTURE OF THE 10 ITEMS LIKERT-TYPE SURVEY

MATERIAL AND METHODS

| Filmed consultation viewing | → | Transcript of the session | → | Comparison between transcription and clinical record | → | Analysis
- Relational
- Risks
- Choice of techniques |

COURSE SEQUENCE METHODOLOGY
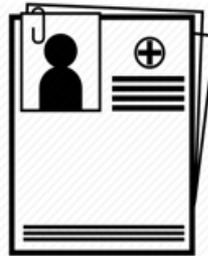
MATERIAL AND METHODS
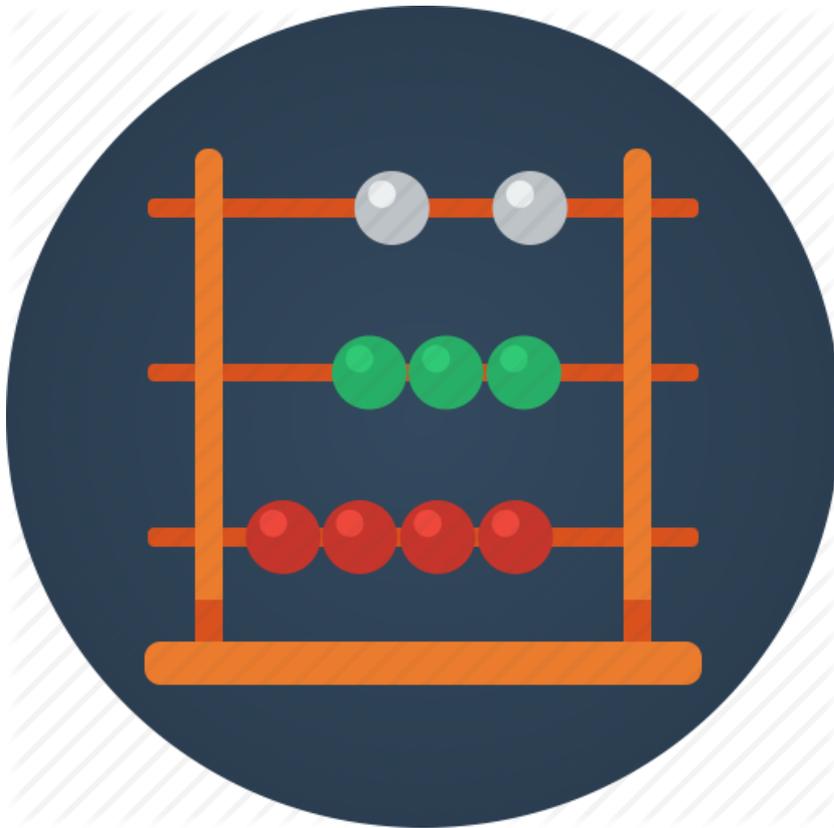
Descriptive statistics
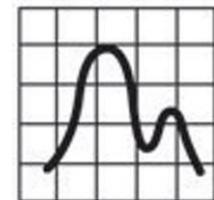
T-test (Student)
Effect Size (Cohen's d)

DATA ANALYSIS

Sullivan, G. M., & Feinn, R. (2012). Using Effect Size—or Why the P Value Is Not Enough. *Journal of Graduate Medical Education*, *4*(3), 279-282

RESULTS

✓ **T0**

Y3 : 47 / 55 respondents (85%)

Y4 : 44 / 56 respondents (79%)

Y5 : 46 / 55 respondents (84%)

✓ **T1** Y3 : 33 / 55 answers (60%)
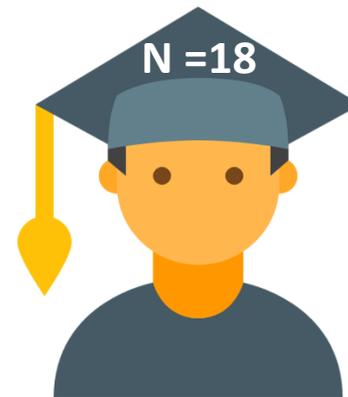
RESULTS

✓ **<u>T0 Average Score</u>**
    vs T1 : 2.9 vs 3.5 ($p < 0.05$) ✱
    vs Y4 : 2.9 vs 3.1 (NS)
    vs Y5 : 2.9 vs 3.6 ($p < 0.05$) ✱

✓ **<u>T1 Average Score</u>**
    vs Y4 : 3.5 vs 3.1 (NS)
    vs Y5 : 3.5 vs 3.6 (NS)

RESULTS

1. Apply appropriate manipulation and mobilization techniques

2. Identify the risks associated with the osteopathic procedure

3. Follow hygiene and safety rules

4. Ensure the traceability of osteopathic procedures

5. Welcome and listen to the person

6. Establish relationship modalities conducive to osteopathic treatment

ES > 1

ES > 0,9

ES > 1

T0 — T1

* $p < 0.05$
ES : Effect Size

TEACHING UNIT 7.3 CLINICAL SKILLS ACQUISITION PERCEPTION AT T0 AND T1

RESULTS

7. Explain the osteopathic treatment project, its benefit/risk ratio, possible side effects

8. Write a medical correspondence as part of multidisciplinary care

9. Provide preventive actions to help maintain and follow-up on people's health status

10. To assess the results of the osteopathic treatment

ES > 1

$p < 0.05$
ES : Effect Size

ADDED CLINICAL SKILLS ACQUISITION PERCEPTION AT T0 AND T1

RESULTS

1. **Apply appropriate manipulation and mobilization techniques**
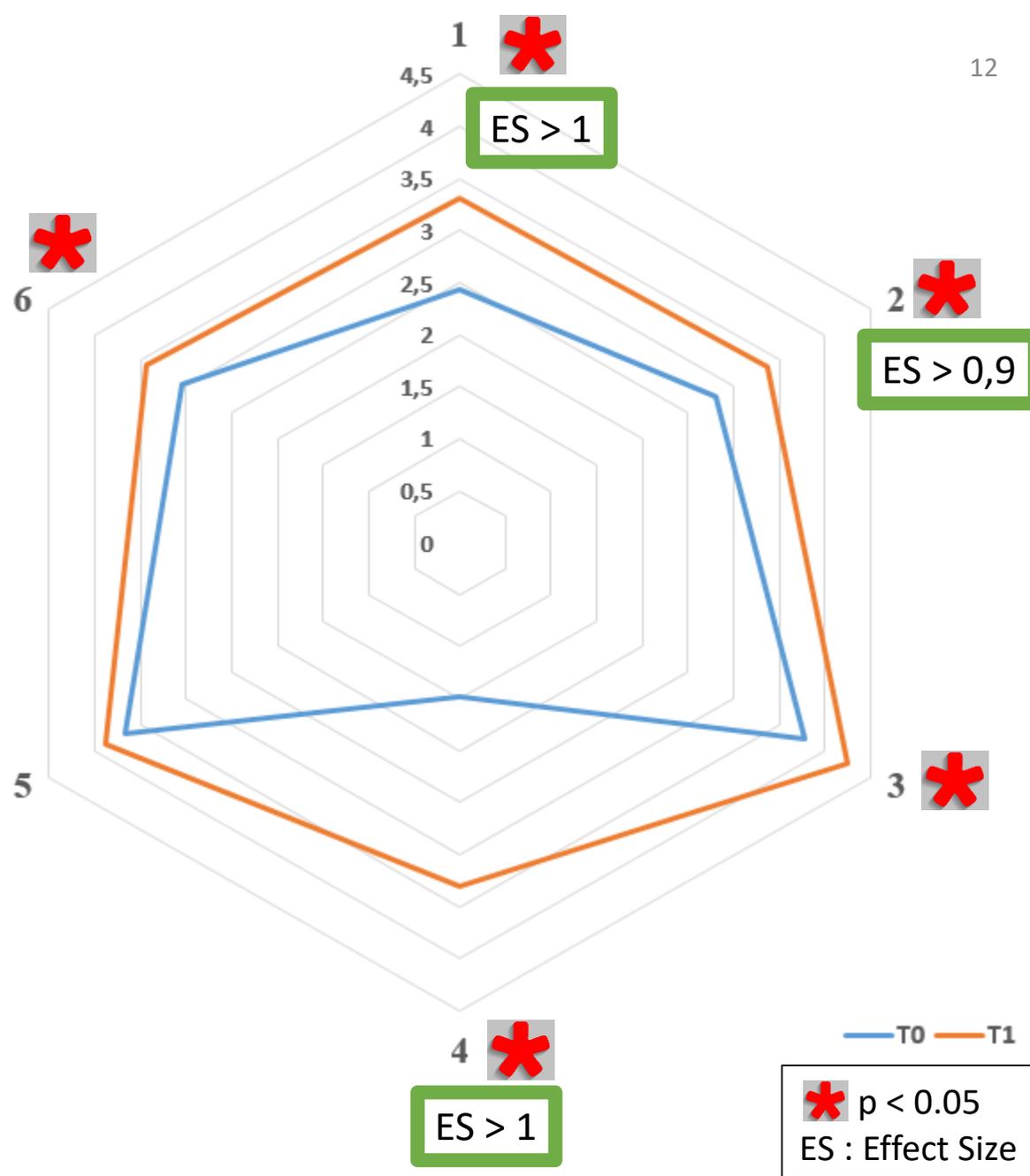
2. **Identify the risks associated with the osteopathic procedure**

3. **Follow hygiene and safety rules**

4. **Ensure the traceability of osteopathic procedures**

5. Welcome and listen to the person

6. **Establish relationship modalities conducive to osteopathic treatment**
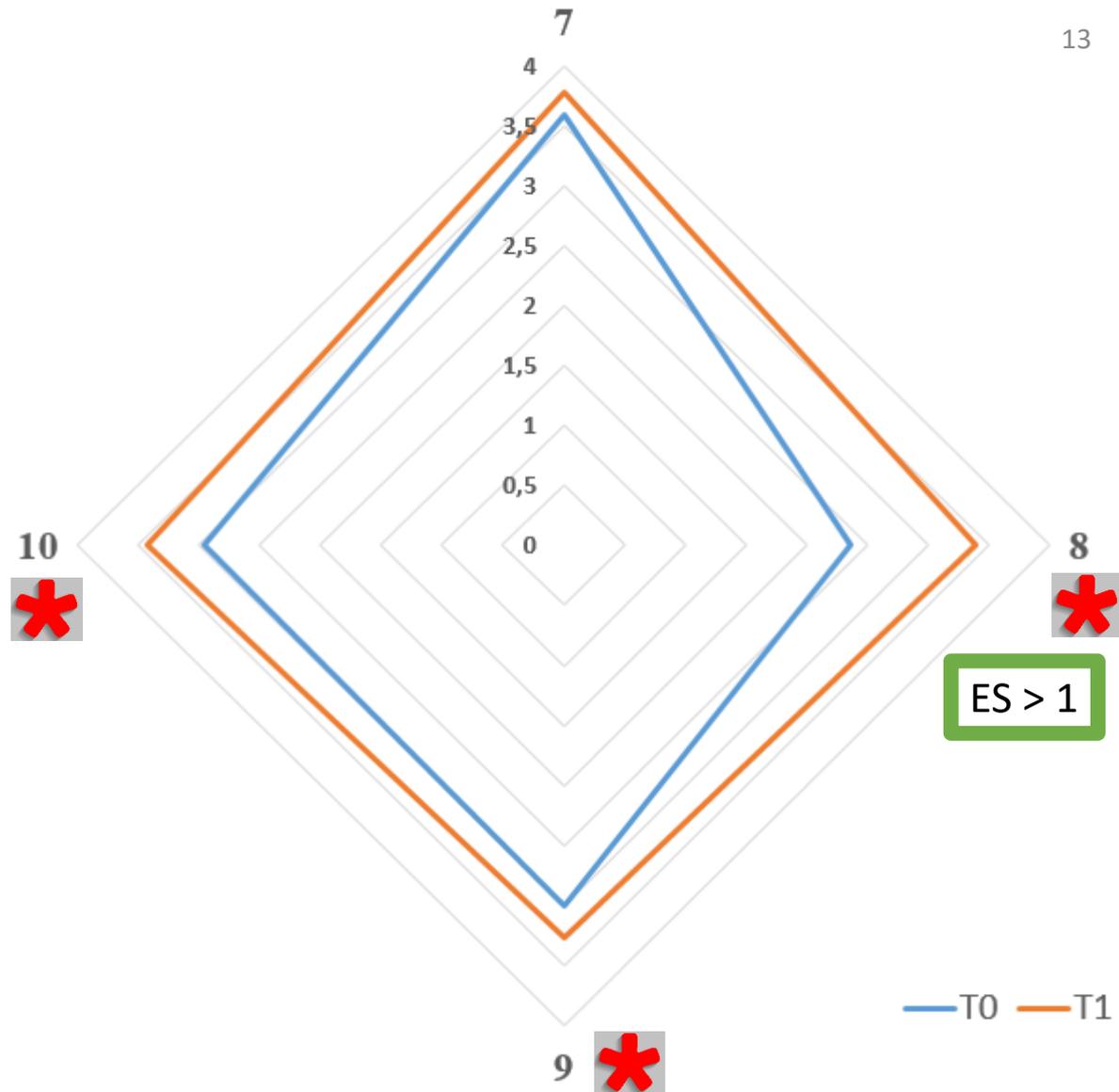
7. Explain the osteopathic treatment project, its benefit/risk ratio, possible side effects

8. **Write a medical correspondence as part of multidisciplinary care**

9. **Provide preventive actions to help maintain and follow-up on people's health status**

10. **To assess the results of the osteopathic treatment**

ES > 1

ES > 1

ES > 1

ES > 1

ES > 1

* p < 0.05
ES : Effect Size

— T0 — T1
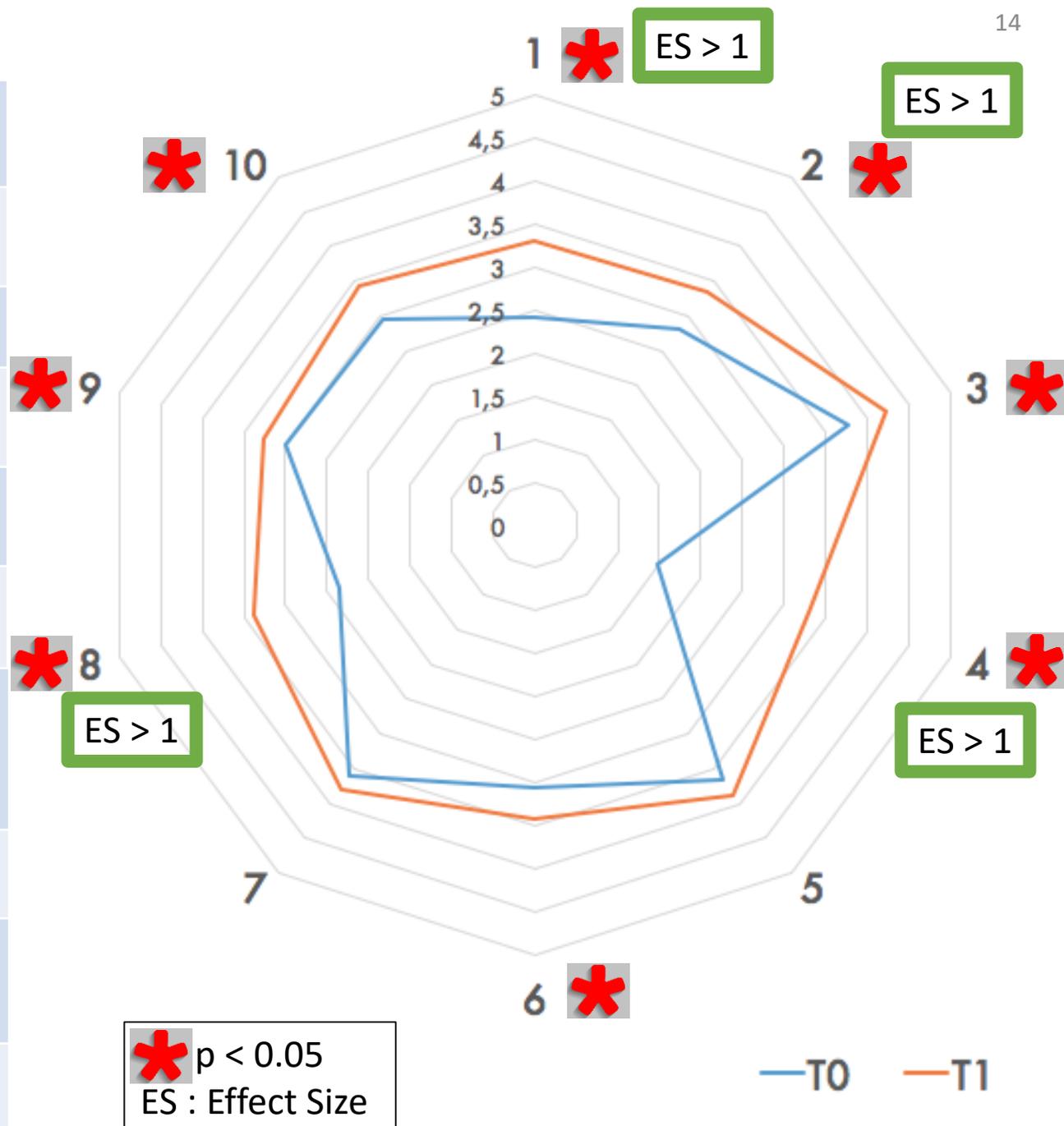
DISCUSSION

✓ **<u>Benefits of this methodology</u>**

- ▪ Real-time FEEDBACK

- ▪ Limiting the effect

- ▪ Easy to use and

- ▪ Adressing the GENERATION Y

Evans, J. R., & Mathur, A. (2013). The value of online surveys. *Internet Research*

DISCUSSION

Traditionalists (<1946)
- Believe authority should be respected.
- Are reluctant to use advanced technology.
- Favor the traditional classroom setting.
- Prefer face-to-face or written communication.

Generation X (1965–1981)
- Value knowledge.
- Benefit from continuous learning but prefer to focus on an outcome rather than the process.
- Enjoy learning with high-tech videos or computer-aided instruction.
- Enjoy fast paced programs that allow for independent problem solving.
- The traditional classroom with multiple speakers DOES NOT WORK.

1940 · 1960 · 1980 · 2000

Baby Boomers (1946–1964)
- View change as an opportunity for problem solving and for experiencing personal growth.
- Are active learners.
- Prefer direct, face-to-face communication.
- Want honest and considerate feedback.
- Favor the traditional classroom but are OK with using computers.

Generation Y (1982–2000)
- Respond well to change.
- Value lifelong learning.
- Are highly collaborative; enjoy working in groups.
- Thrive using technology.
- Enjoy a mentoring-coaching form of education.
- Appreciate communication through teamwork, team meetings, email, and chat rooms.
- Benefit from case studies and simulation and desire IMMEDIATE feedback.

Teaching and learning styles by generation

Gillispie, V. (2016). Using the Flipped Classroom to Bridge the Gap to Generation Y. *The Ochsner Journal*, *16*(1), 32–36.

DISCUSSION

Creating a video library of relevant clinical cases

King, L. & al. (2018). Clinical reasoning in osteopathy: Experiences of novice and experienced practitioners. *International Journal of Osteopathic Medicine*, *28*, 12–19.

CONCLUSION
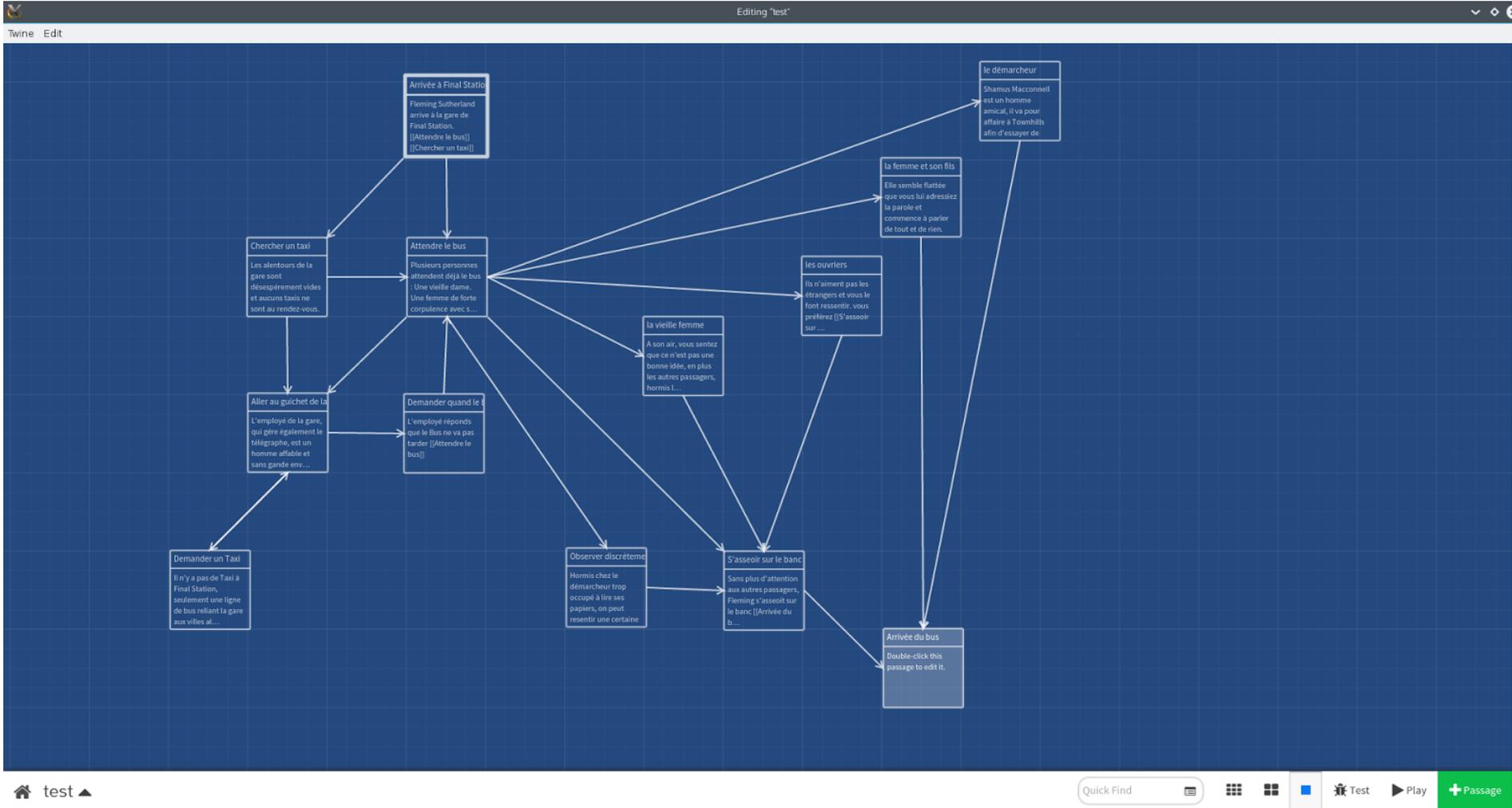
Thank you for your attention !