8th "Open Forum for Osteopathic Education" Conference

29th & 30th September 2022

TEACHING
CLINICAL COMPETENCIES

Antwerp, Belgium

The use of Critical Incident Technique as a tool to identify students' perceived issues in osteopathic clinical training.

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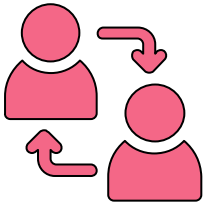
ISO ISTITUTO SUPERIORE OSTEOPATIA

Background

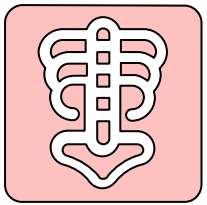
Critical incident technique (CIT) is a methodology adapt to transform anecdotal experiences into useful data (FitzGerald et Al. 2008). It aims to explore what helps or hinders in providing good quality service or care.

In medical and health profession education, CIT has been used to conduct qualitative and quantitative research on several aspects of students' learning and training experience (Embrey and Taggart 2020) and their development as professionals (Branch et Al. 1993).

Background



Critical incidents' analysis provides field information that can allow educators to implement teaching and training strategies (Steven et Al. 2020) as well as foster transformative learning as the foundation stone in becoming professional (Branch 2005).



In the osteopathic educational field critical incidents reflective analyses are used in some institutions as evaluative tools, but to the author's knowledge, an in-depth analysis of perceived clinical training criticalities has not been disseminated.

Pro and Cons of CIT

Pro

Quickly

Uncover system issuess

Capture

information about rare or uncommon incidents

Emphasis

on more-important issues rather than less-important issues.

Cons

Relies

on memory and pure recall

Doesn’t

Represent typical situation

Critical Incidents Tecnique

(Flanagan 1954)

1

Estabilish Aims

Identify which situations and/or conditions are perceived by osteopathic students as critical during their clinical training.

Explore possible differences in perceived criticalities in subpopulation by gender, academic achievement and pre and pandemic period,

Prioritize specific issues worth of future qualitative research to develop instructional strategies.

Specify Plans

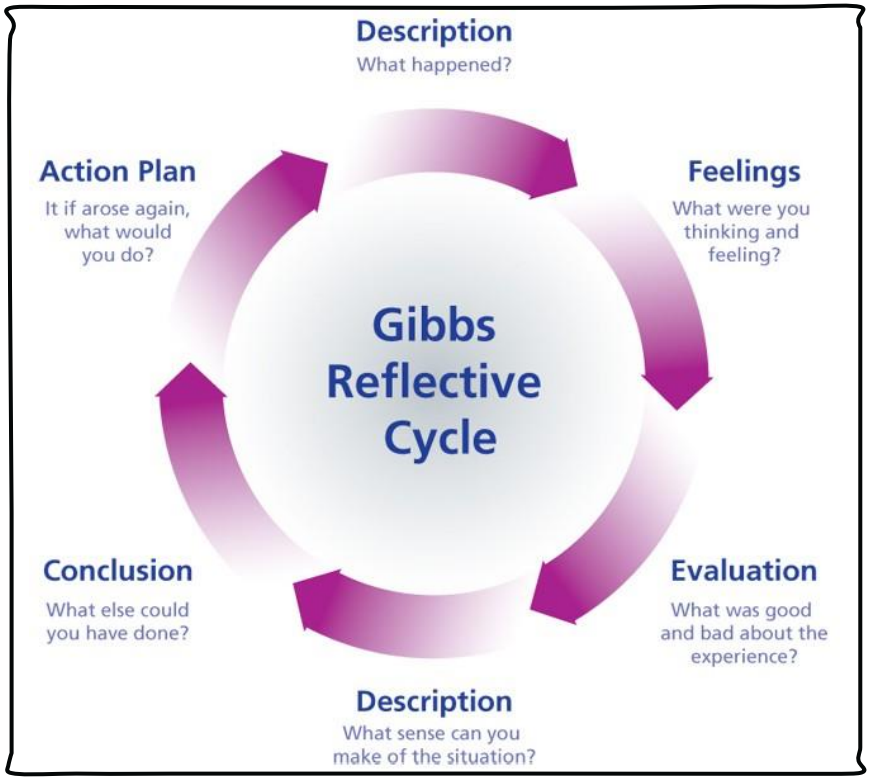
At ISO, final year students are required to produce, as a summative assessment, a reflective analysis essay (3000 words) of a critical incident that happened during their clinical training using Gibbs reflective cycle.

Collected essay has been analyzed with a mixed method methodology

Thematic qualitative analysis following procedure proposed by Braun and Clark (2006) has been used to identify overarching themes, main themes and sub-themes.

Quantitative analyses has been used to observe themes' distribution in the population and compare it between subpopulation by gender, academic performance and before/during pandemy.

Specify Plans

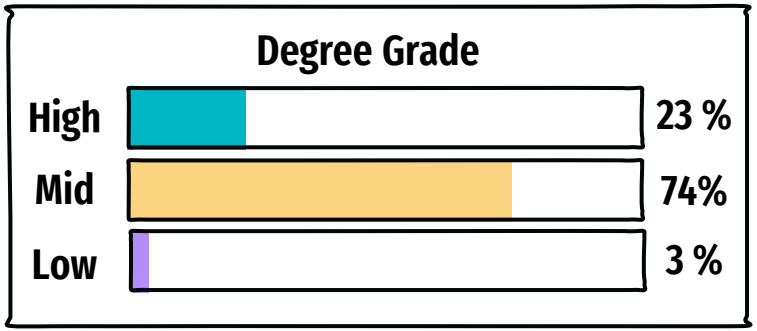


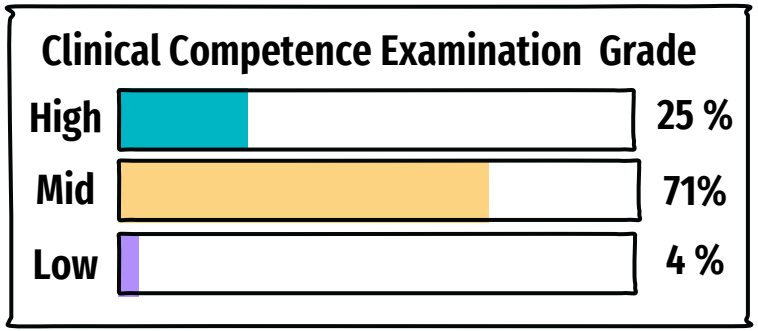
Collect Critical Incident

AY	M	F	Tot
16/17	16	19	35
17/18	19	18	37
18/19	16	20	36
19/20	17	22	39
20/21	10	18	28
21/22	30	31	61
Tot	108	128	236

236 critical incident reflective essays were collected (108 from male students, 128 from female students) from academic years 16/17 to 21/22.

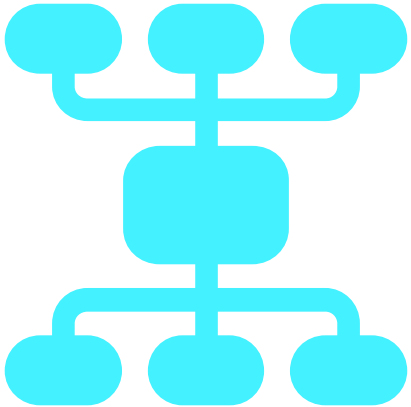
Critical incidents have been grouped by overall degree grade and clinical examination grade.





Analize Data

Thematic analysis has identified **85 sub-themes** that have been grouped in **17 themes**.
Themes have been grouped in **5 overarching themes**



Overarching Themes

Student's characteristics

Relationship with Patient

Therapeutic Encounter

Relations with Others
(no patients)

Patient's characteristics

Overarching Themes

22,1% Student's characteristics

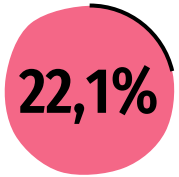
18,5% Therapeutic Encounter

17,9% Patient's characteristics

Relationship with Patient 31,9%

Relations with Others (no patients) 9,6%

Main Themes



Student's characteristics

Student's attitudes

Student's emotions

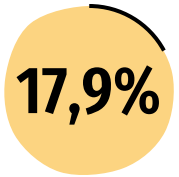
Ethical dilemmas

Therapeutic Encounter

Adverse events

Therapeutic efficacy

Competence's issues



Patient's characteristics

Patient's Bias

Pt. Management (behaviour)

Pt. Management (clinical complexities)

Relationship with Patient

Communication with Patient

Negotiation with Patient

Emphaty

Boundaries Management

Relations with Others (no patients)

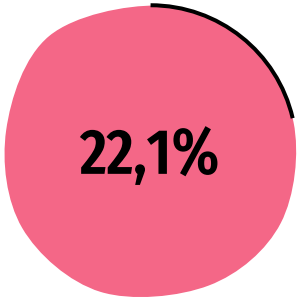
Relatives/Caregivers

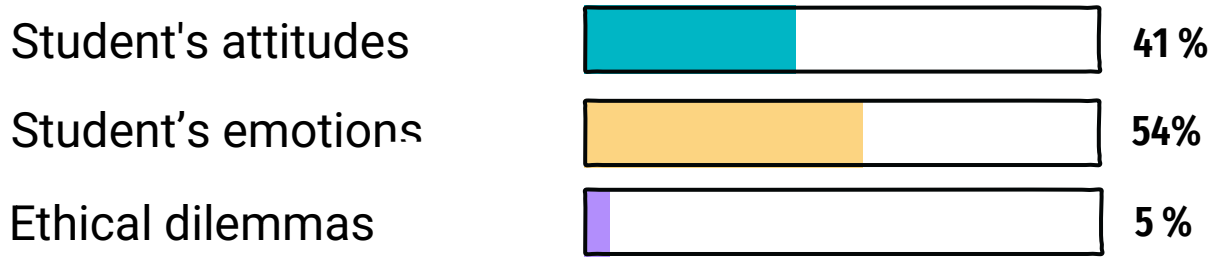
Professional Collaboration

Clinic Tutors

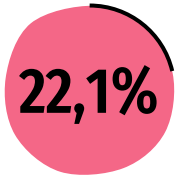
Main Themes

Student's characteristics





Main Themes



Student's characteristics

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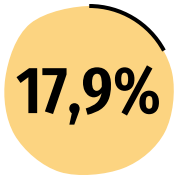

Patient's characteristics

Patient's Bias

Pt. Management (behaviour)

Pt. Management (clinical complexities)

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Communication with Patient

Negotiation with Patient

Emphaty

Boundaries Management

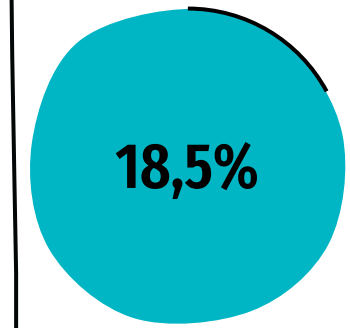
Relations with Others (no patients)

Relatives/Caregivers

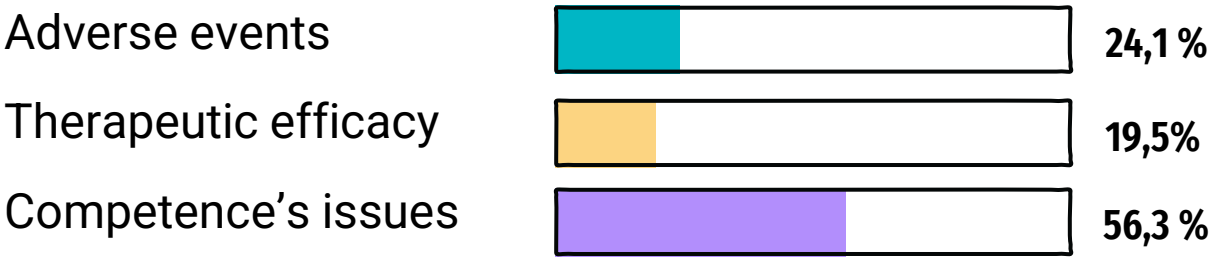
Professional Collaboration

Clinic Tutors

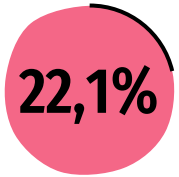
Main Themes



Therapeutic Encounter



Main Themes



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Student's emotions

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Therapeutic efficacy

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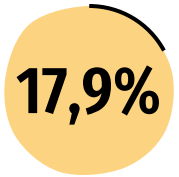

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Pt. Management (clinical complexities)

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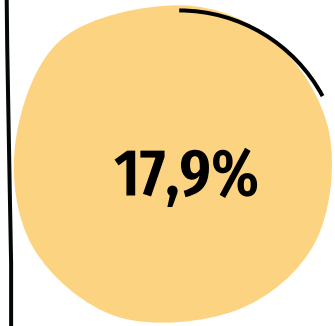
Main Themes

Patient's characteristics



Patient’s Bias

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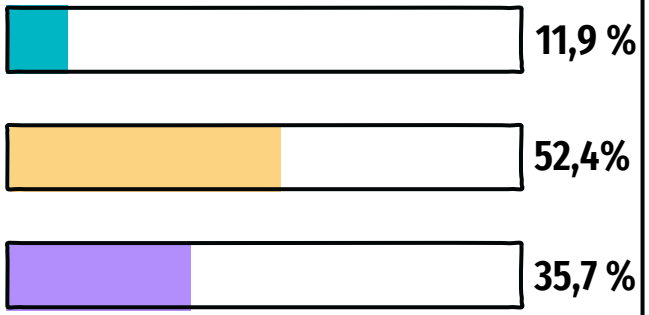

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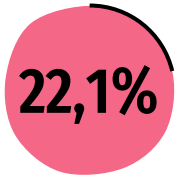

Student's characteristics

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Student's emotions

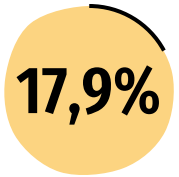
Ethical dilemmas

Therapeutic Encounter

Adverse events

Therapeutic efficacy

Competence's issues



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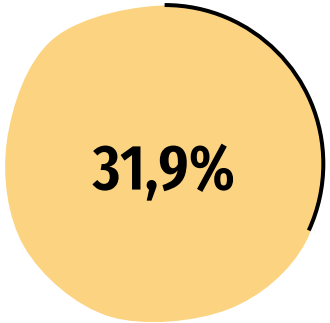
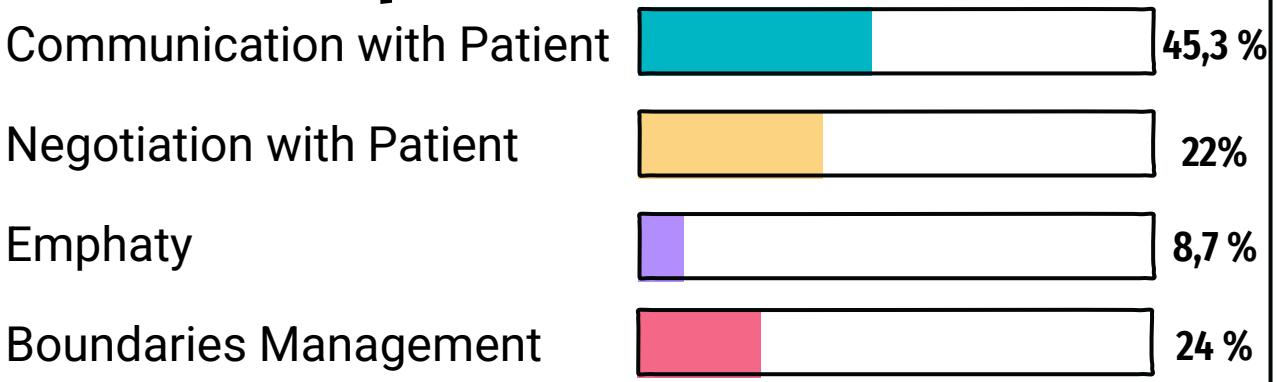
Relationship with Patient





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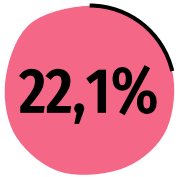

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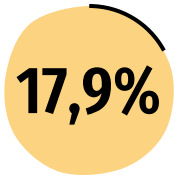

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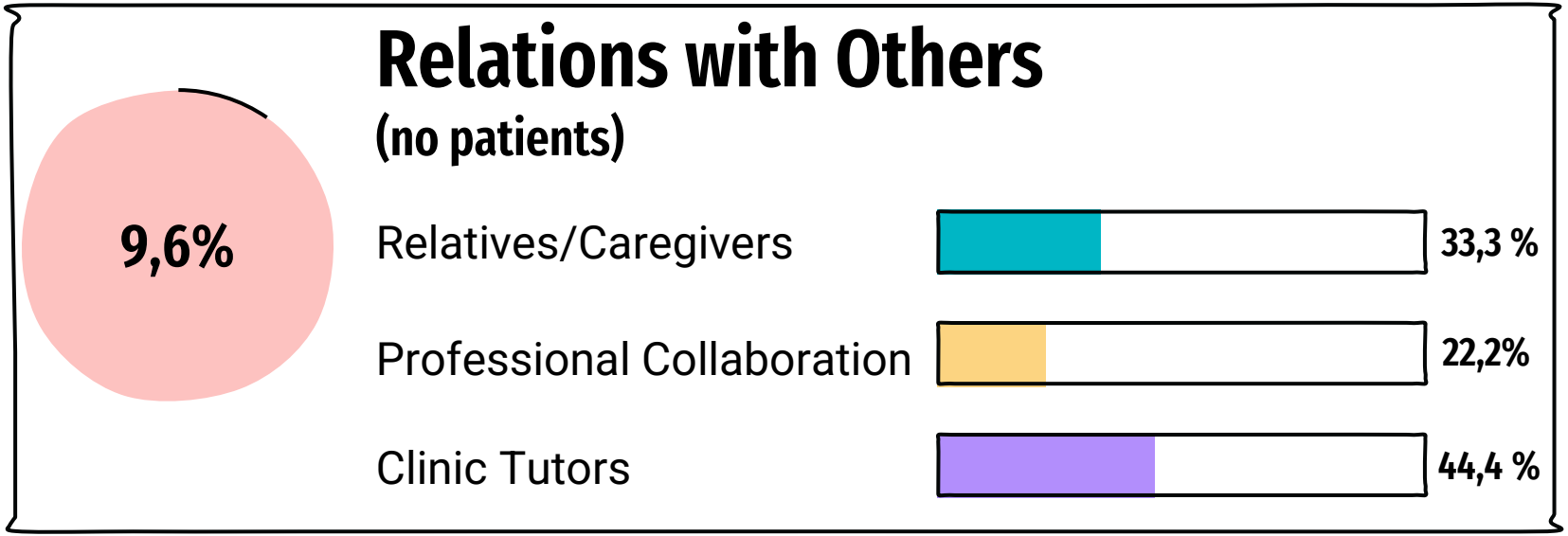
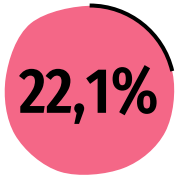

9,6%
Relations with Others
(no patients)
Relatives/Caregivers
33,3 %
Professional Collaboration
22,2%
Clinic Tutors
44,4 %

Main Themes



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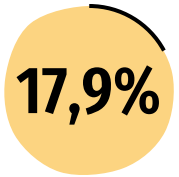

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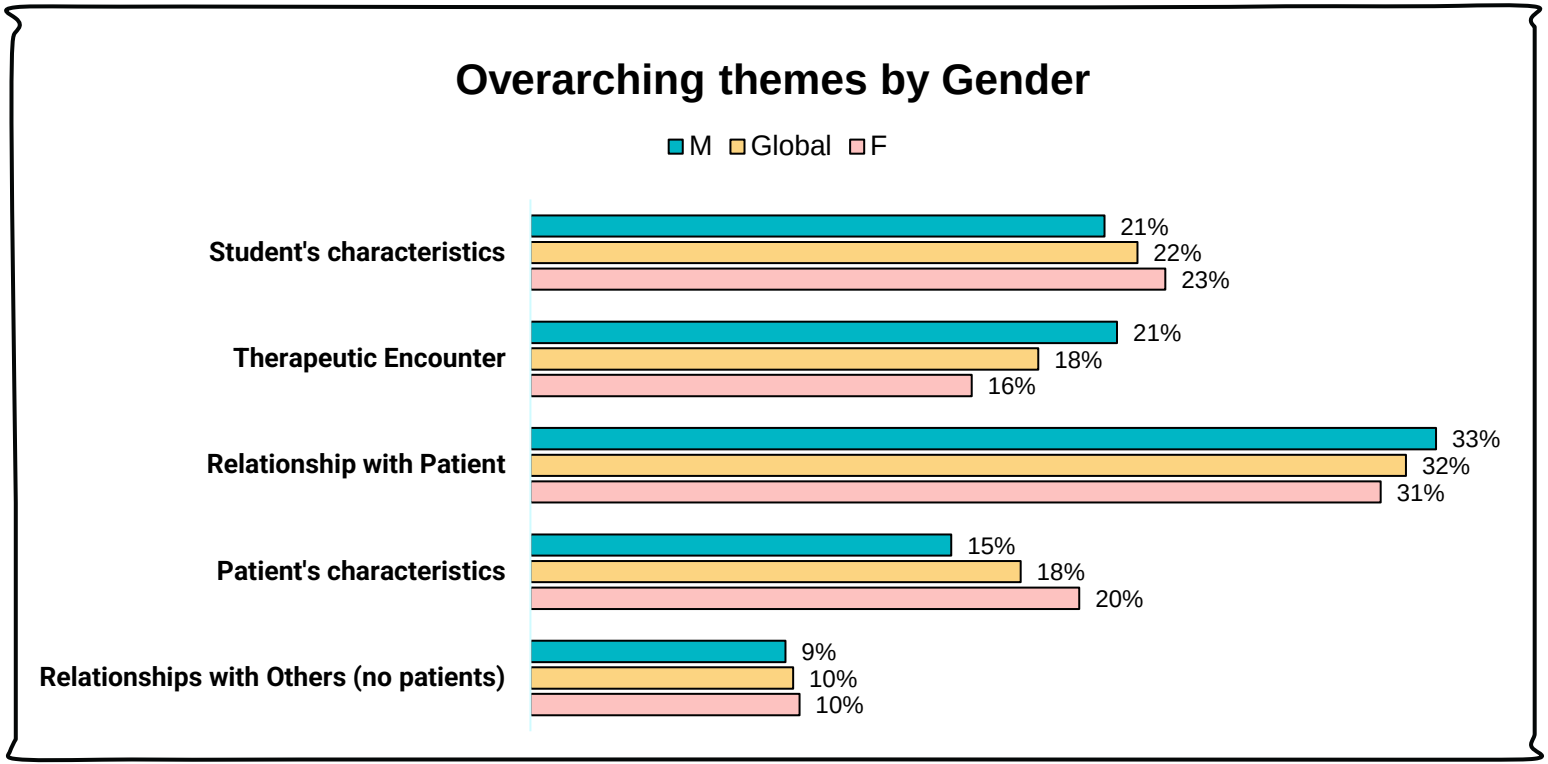
Overarching Themes



Main Themes

Male

Communication with Patient	16,2%
Competence's issues	11,6%
Student's emotions	10,2%
Student's attitudes	9,3%
Pt. Management (clinical complexities)	7,9%

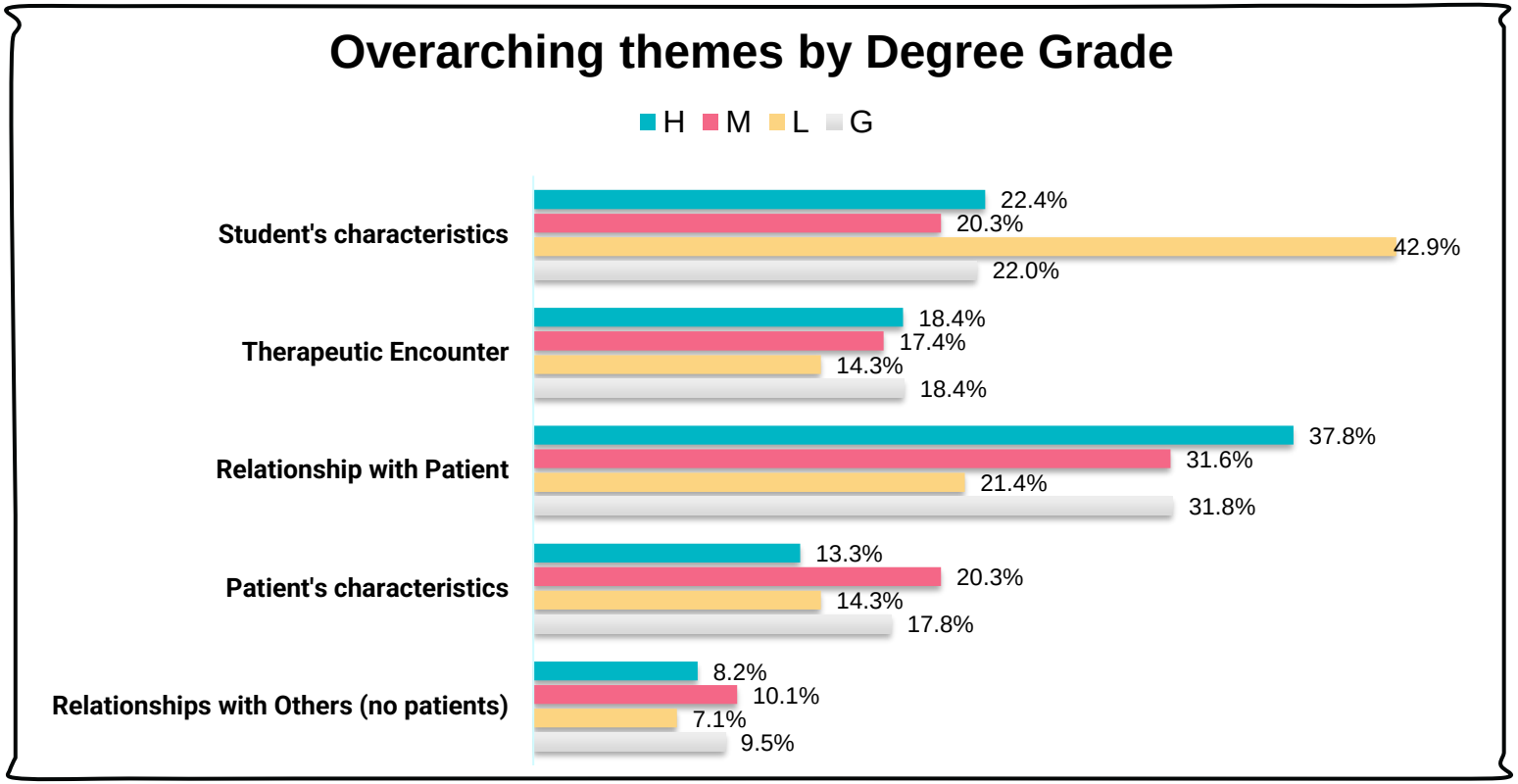
Female

Student's emotions	13,3%
Communication with Patient	12,9%
Pt. Management (behaviour)	11,3%
Competence's issues	9,4%
Student's attitudes	9%

Global

Communication with Patient	14,4%
Student's emotions	11,9%
Competence's issues	10,4%
Pt. Management (behaviour)	9,3%
Student's attitudes	9,1%

Overarching Themes



Main Themes

High Achievers

Student's emotions	12,2%
Communication with Patient	12,2%
Boundaries Management	12,2%
Competence's issues	11,2%
Negotiation with patient	10,2%

Medium Achievers

Communication with Patient	13,9%
Student's emotions	10,8%
Competence's issues	10,8%
Pt. Management (behaviour)	10,5%
Boundaries' Management	9,3%

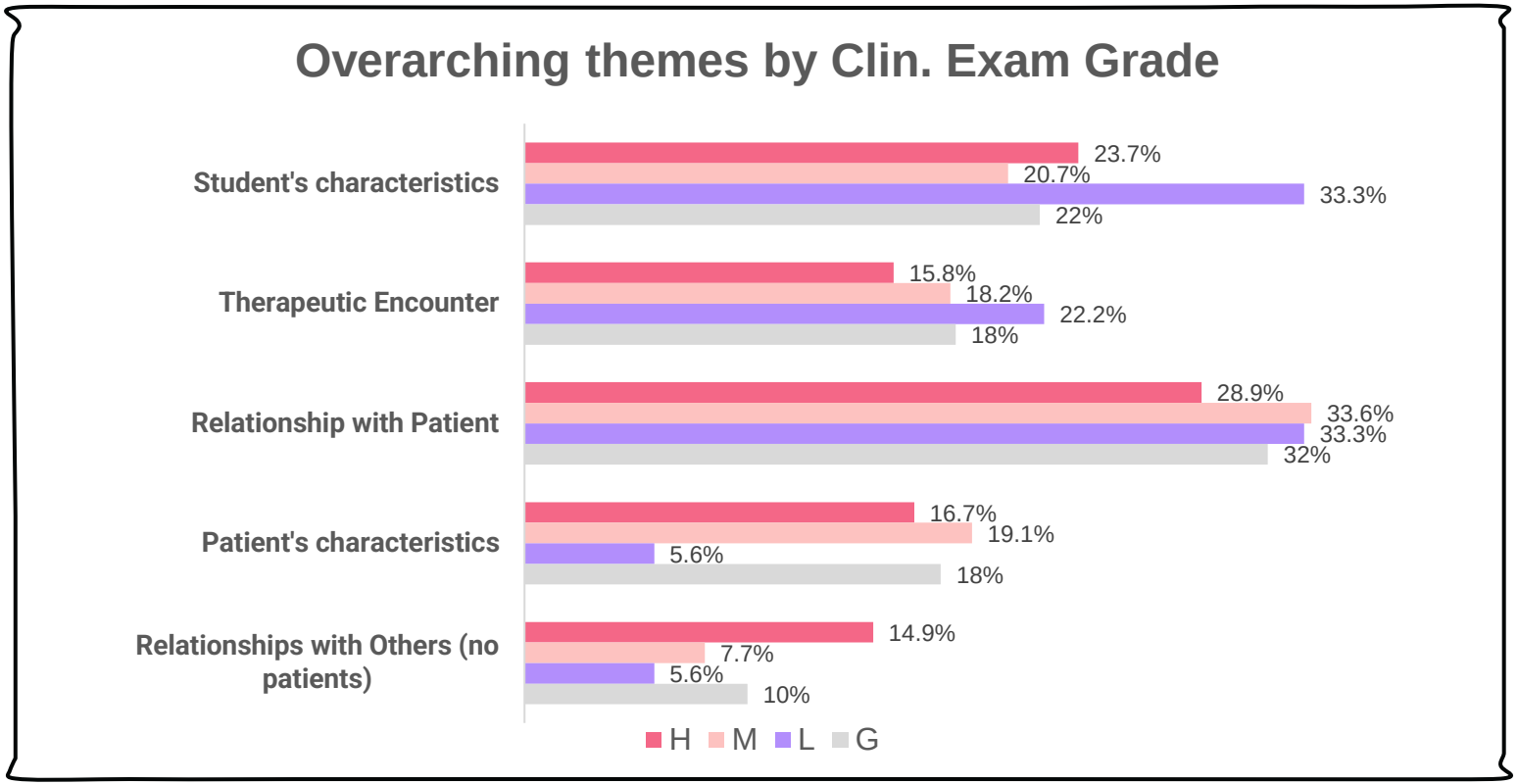
Low Achievers

Student's emotions	21,4%
Student's attitudes	14,3%
Adverse event	14,3%
Communication with Patient	7,1%
Pt. Manag. (behaviour)	7,1%

Global

Communication with Patient	14,4%
Student's emotions	11,9%
Competence's issues	10,4%
Pt. Management (behaviour)	9,3%
Student's attitudes	9,1%

Overarching Themes



Main Themes

High Achievers

Communication with Patient	14,9%
Student's emotions	14%
Student's attitudes	8.8%
Competence's issues	8,8%
Negotiation with patient	7,9%

Medium Achievers

Communication with Patient	16,1%
Student's emotions	11,1%
Competence's issues	11,3%
Pt. Management (behaviour)	10,4%
Student's attitudes	8,2%

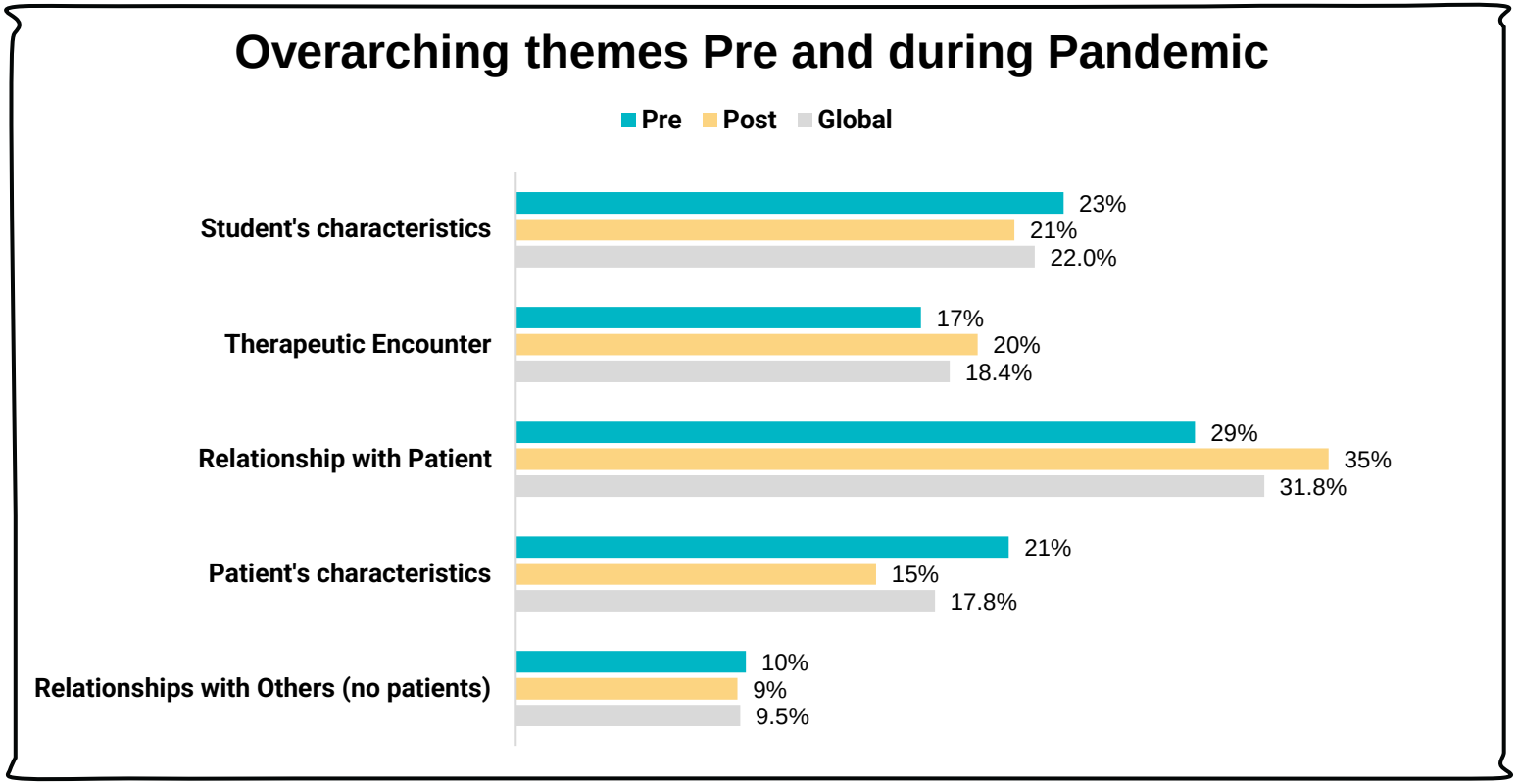
Low Achievers

Communication with Patient	27,8%
Student's attitudes	22,2%
Competence's issues	16,7%
Student's emotions	11,1%
Pt. Manag. (clinical complexity)	5,6%

Global

Communication with Patient	14,4%
Student's emotions	11,9%
Competence's issues	10,4%
Pt. Management (behaviour)	9,3%
Student's attitudes	9,1%

Overarching Themes



Main Themes

Pre Pandemic

Communication with Patient	14,4%
Student's emotions	12,1%
Pt. Manag. (complexity)	9.8%
Student's attitudes	9,3%
Competence's issues	9,3%

Pandemic

Communication with Patient	14,5%
Student's emotions	11,8%
Competence's issues	11,4%
Pt. Management (behaviour)	9,8%
Student's attitudes	9%

Global

Communication with Patient	14,4%
Student's emotions	11,9%
Competence's issues	10,4%
Pt. Management (behaviour)	9,3%
Student's attitudes	9,1%

Determine Outcomes

Identify which situations and/or conditions are perceived by osteopathic students as critical during their clinical training.

Five overarching themes have been identified encompassing both personals dimension and relational ones.

Identified main themes refer to specific issues of the clinical encounter and students training with a relevance of communication and emotional issues.

Sub-themes are heterogenous and have varied distribution, further research is needed to validate their relative weight.

Determine Outcomes

Explore possible differences in perceived criticalities in subpopulation by gender, academic achievement and pre and pandemic period.

Distribution by gender doesn't identify strong differences.

Academic achievement shows a criticality perception focused on relationship with patient for high achievers and on students characteristics for low ones.

The pandemic period shows a shift toward relational issues as critical compared to student and patient characteristics

Determine Outcomes

Prioritize specific issues worth of future research to develop instructional strategies.

Qualitative content analyses is strongly needed to explore sub-themes in order to develop specific instructional strategies

Qualitative thematic analyses by other coders is needed to enhance the validity of the identified themes.

Quantitative advanced analysis is needed to identify statistical significant correlations between themes and sub-themes to define useful research questions

Determine Outcomes

Thanks for the attention