

OSTEOPATHIC STUDENT SATISFACTION AND PREPAREDNESS TO PRACTICE: A COMPARATIVE STUDY.

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Background

- Osteopathy has a great diversity of training and education across Europe.
- Work to increase transparency of qualifications and improve cooperation and lifelong learning in Europe is underway.
 - ◆ FORE (consensus on standards of osteopathic education, training and practice across Europe)
 - ◆ Bologna process (enhancing free mobility, recognition of foreign degree)
 - ◆ World Health Organization (benchmark)
- Evidence shows that learning environment is one of the most important factors that influence preparedness to practice (Goldrace et al. 2003; Cave et al. 2007, Tokuda et al. 2010).



Purpose of the study

- To investigate levels of the satisfaction with the learning environment and the preparedness to practice from the perspective of osteopathic students, comparing full-time schools (BSO, AIOT, CEESO) in three different countries (UK, Italy and France).
- To analyse relationships between learning environment and perceived preparedness to practice



Materials & methods

Participants

All final year students at:

- BSO
- CEESO
- AIOT

Measurements

Two questionnaires, scored on a five-point Likert scale, were used for the purpose of the study:

- DREEM: perceived satisfaction in the learning environment. Consisted of 50 questions organized in 5 topics
- AAMC: perceived preparedness. Consisted of 7 questions.

Questionnaires were posted in an on-line platform called EBOM-OSTEOQ. A recruiting advert was posted in the BSO, AIOT and CEESO forums. Only final year students were allowed to the relevant forum.



Materials & methods 2

Statistical analysis

- Data was analysed using R version 2.14.0.
- Assessment of normality was performed using Shapiro test.
- Equivalence of variance was tested using Levene/s F test
- General characteristic of the population was analyzed using mean, SD and %.
- ANOVA to compare the 5 DREEM subscales and preparedness between schools.
- GLM to explore the relationship between learning environment and preparedness.

Ethical committee

Ethical approval was obtained from the BSO, AIOT and CEESO Research Ethics Committee



Results

Sample size

School	Participants	Respondents	Response rate
BSO	88	51	58%
CEESO	79	63	80%
AIOT	12	12	100%

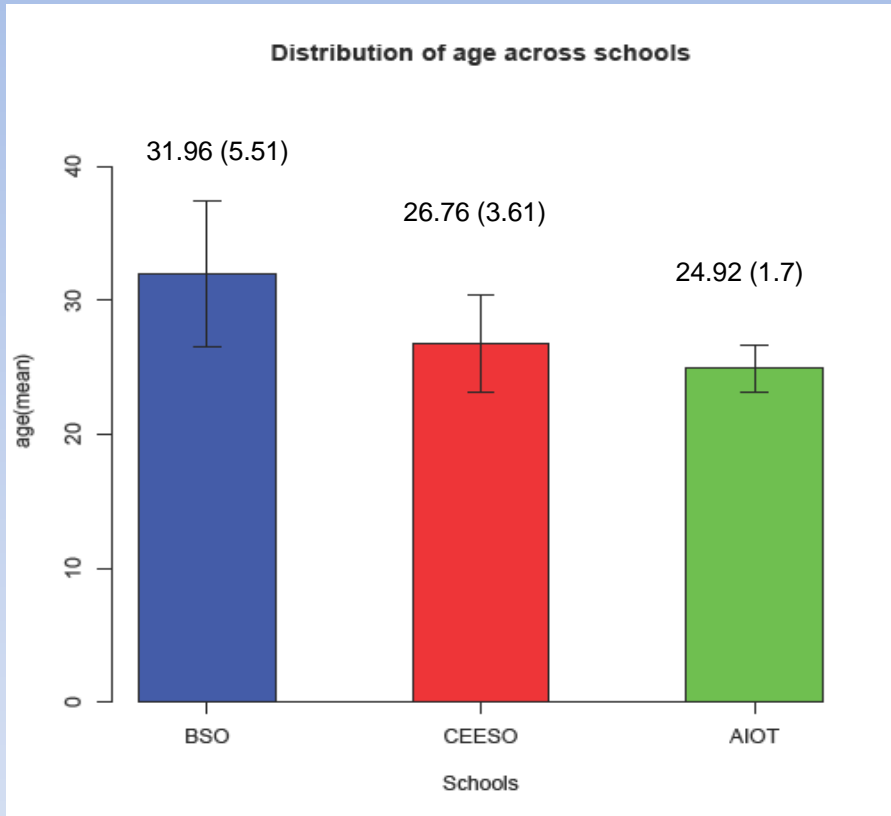
General characteristics

There were no statistically significant differences related to student gender ($p=0.45$; $X^2=1.60$)

There were no statistically significant differences related to previous experience ($p=0.30$; $X^2=2.41$)



Results 2



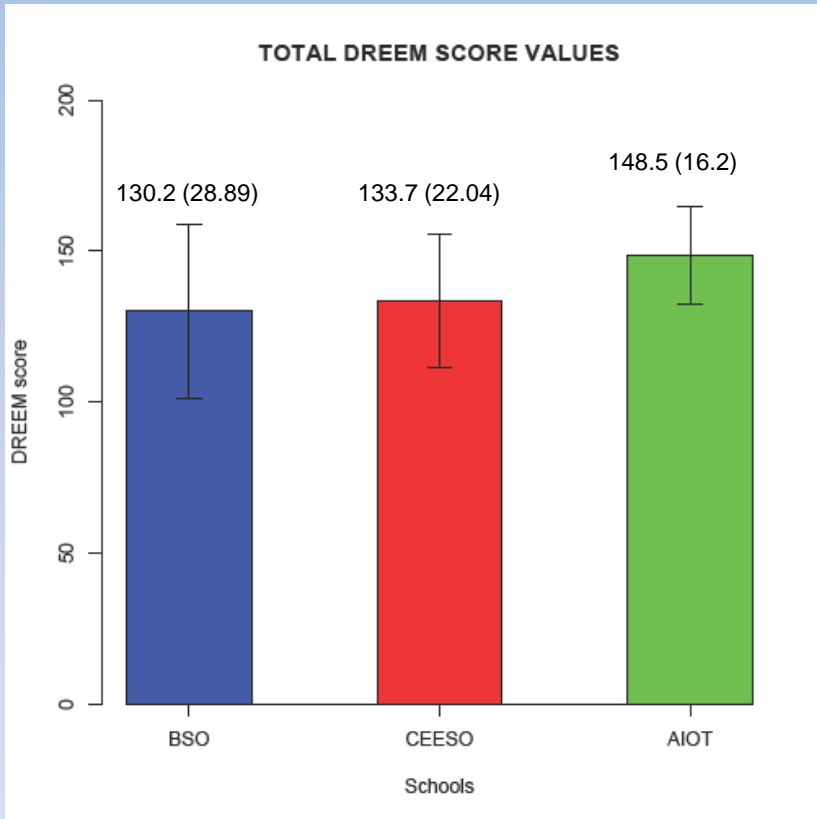
BSO-AIOT $P < 0.001$
BSO-CEESO $P < 0.001$
CEESO-AIOT = 0.37

The students at the BSO
were older than those
attending the other 2 schools



Results 3

Learning environment

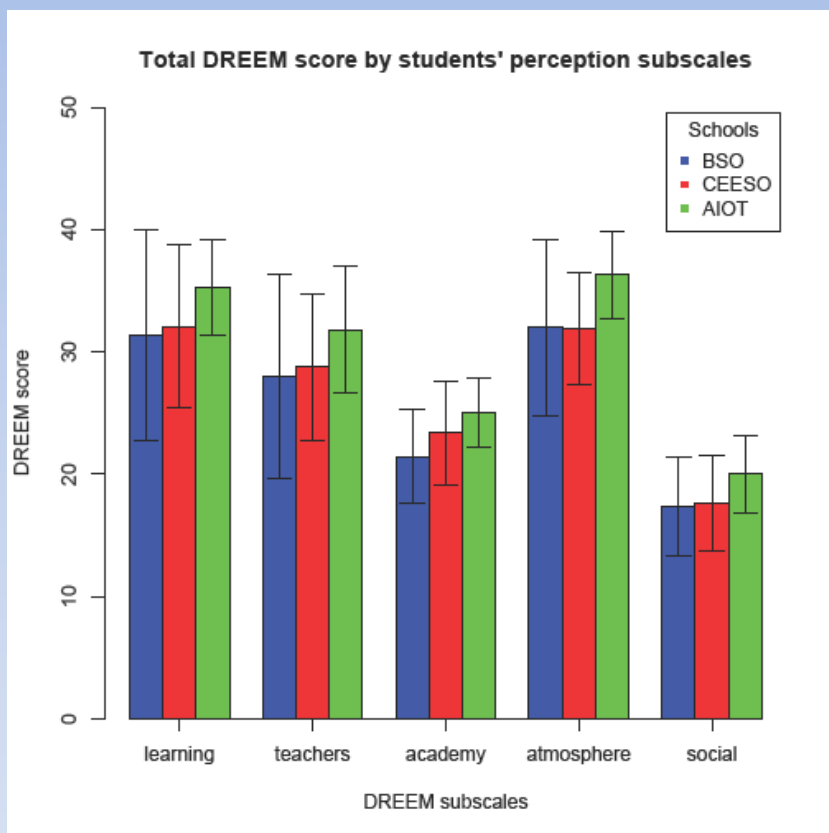


Overall DREEM score	Interpretation
0-50	Very poor
51-100	Plenty of problems
101-150	More positive than negative
151-200	Excellent



Results 4

Subscales learning environment



SASP

BSO-AIOT $p=0.01$

CEESO-BSO $p=0.03$

SPA

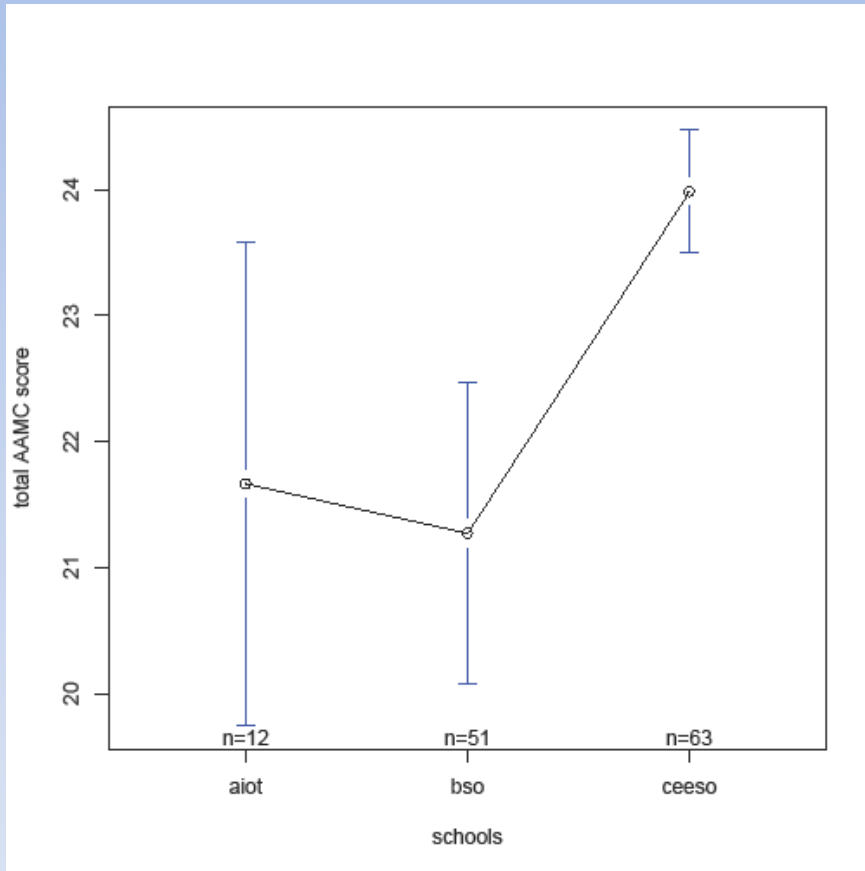
BSO-AIOT $p<0.05$

CEESO-AIOT $p=0.04$



Results 5

Preparedness



CEESO-BSO $p < 0.001$

Students attending the CEESO reported feeling significantly more prepared for practice life than those attending the BSO

Results 6

Independent role of the learning environment

	SPL			SPT			SASP			SPA			SSSP		
	β	95%c.i.	$p>\chi^2$	β	95%c.i.	$p>\chi^2$	β	95%c.i.	$p>\chi^2$	β	95%c.i.	$p>\chi^2$	β	95%c.i.	$p>\chi^2$
AIOT	0.60	0.26, 0.94	<u><0.01*</u>	0.35	0.02, 0.68	<u>0.02*</u>	0.62	0.01, 1.23	<u>0.04*</u>	0.51	0.04, 0.99	<u>0.02*</u>	0.44	-0.16, 1.04	0.1
BSO	0.30	0.19, 0.41	<u><0.01*</u>	0.35	0.24, 0.46	<u><0.01*</u>	0.61	0.34, 0.88	<u><0.01*</u>	0.40	0.27, 0.52	<u><0.01*</u>	0.55	0.28, 0.81	<u><0.01</u>
CEESO	0.06	-0.01, 0.14	0.20	0.01	-0.07, 0.10	0.80	0.05	-0.07, 0.16	0.6	0.14	0.04, 0.24	<u><0.05</u>	0.07	-0.05, 0.20	0.4



Discussion

- In summary learning environment was perceived positively for all schools. However:
 - ◆ AIOT scored higher than CEESO and BSO.
 - ◆ SASP in the BSO was lower than AIOT and CEESO
 - ◆ SPA in the AIOT was higher than CEESO and BSO
- Students perceived a better preparedness in the CEESO than AIOT and BSO.
- The learning environment was positively related to preparedness, especially for the BSO.



Limitations

47% BSO, 30% CEESO and 30% AIOT had previous experience in healthcare, leading to a potential bias.

Small sample size for AIOT compared to BSO and CEESO.

Limited ability of self-assess (Gordon et al., 1991; Jones et al., 2002; Davis et al., 2006)



Strength

This was the first known study carried out in collaboration with three European osteopathic schools looking at the relationships between the learning environment and feelings about preparedness for practice life.

It used recognised questionnaires as outcome measures.



Conclusion

Learning environment was perceived by students as being better in the AIOT school. However, this could be due to a smaller class size.

CEESO students felt more confident about their preparedness for practice than those attending AIOT and BSO. However, research has shown limited ability and reliability in self-assessment questionnaires.

These results show that the learning environment may be partly responsible for differences in perceived preparedness. Other factors may be changes in student selection, early exposure to clinical practice, increased attention by teachers.



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