

# How well do medical students express empathy?

Sun Kim<sup>1</sup>, A Ra Cho<sup>1</sup>, Yera Hur<sup>2</sup>

<sup>1</sup>Department of Medical Education, The Catholic University of Korea College of Medicine

<sup>2</sup>Department of Medical Education, Konyang University College of Medicine, Korea

## Objective

Empathy is an important trait of a physician and a key element in the physician-patient relationship. This study examined 4 overarching topics;

- 1) What are medical students' pencil-and-paper empathy rating test results?
- 2) Are there difference in the ability to express empathy by genders?
- 3) Are there difference in the ability to express empathy by school systems?
- 4) Are there difference in the ability to express empathy by academic levels?

## Methods

Medical student empathy was measured by the modified Pencil-and-Paper Empathy Rating Test of Winefield & Chur-Hansen (2001). Medical students took about 15 minutes to complete the scale, and it was then scored by one of two trained evaluators (coding rules=0 to 4-point scale, total score=40). The subjects comprised 605 medical students (medical school=205, medical college=400). The data were analyzed by descriptive statistics, t-test, and one-way ANOVA using SPSS version 21.0 (IBM Corp.).

## Results

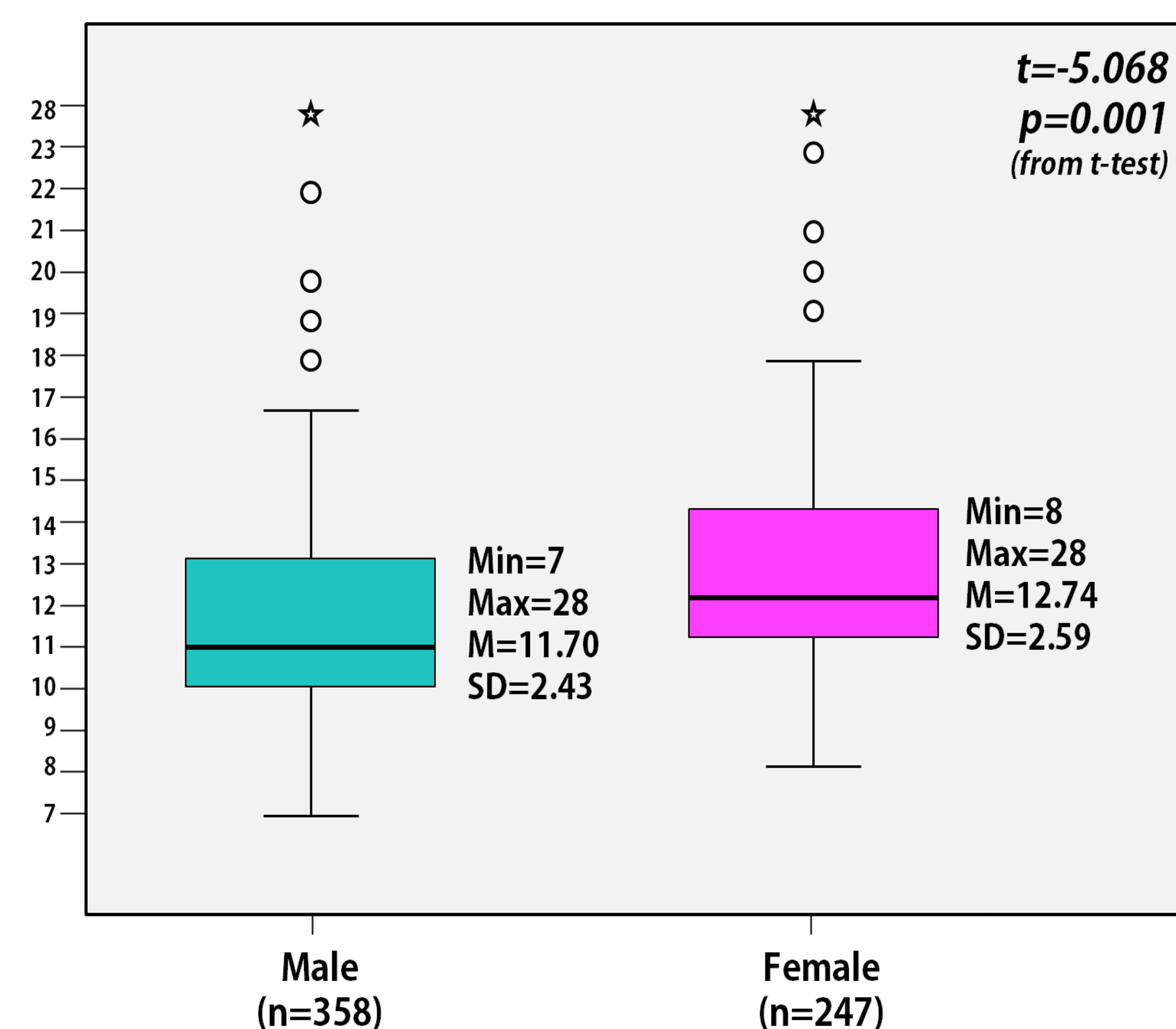
### 1. Medical Students' Empathy Expression Scores

Case	Response Scales				Mean	SD	Scale Coding rules
	0	1	2	3			
1	2 (0.3)	454 (75.0)	126 (20.8)	23 (3.8)	-	1.28	0.53
2	33 (5.5)	259 (42.8)	272 (45.0)	41 (6.8)	-	1.53	0.70
3	2 (0.3)	488 (80.7)	96 (15.9)	19 (3.1)	-	1.22	0.49
4	5 (0.8)	508 (84.0)	83 (13.7)	9 (1.5)	-	1.16	0.42
5	5 (0.8)	511 (84.5)	78 (12.9)	11 (1.8)	-	1.16	0.43
6	1 (0.2)	499 (82.5)	94 (15.5)	11 (1.8)	-	1.19	0.44
7	27 (4.5)	431 (71.2)	126 (20.8)	21 (3.5)	-	1.23	0.58
8	3 (0.5)	530 (87.6)	66 (10.9)	6 (1.0)	-	1.12	0.37
9	5 (0.8)	553 (91.4)	43 (7.1)	4 (0.7)	-	1.08	0.32
10	3 (0.5)	519 (85.8)	68 (11.2)	15 (2.5)	-	1.16	0.44
Total	86 (1.4)	4752 (78.6)	1052 (17.4)	160 (2.6)	-	12.13	2.55

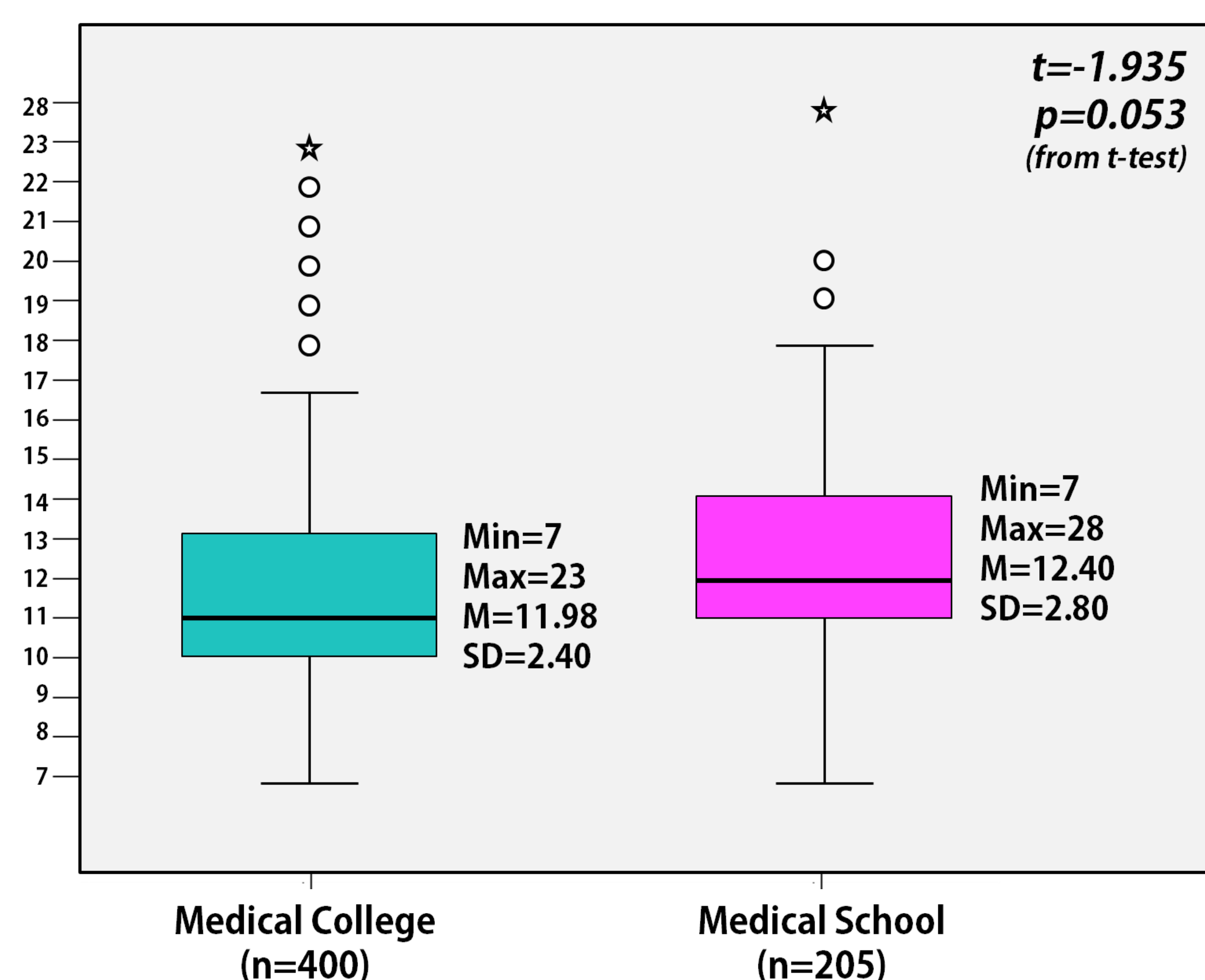
Adapted from Winefield HR, Chur-Hansen A. Evaluating the outcome of communication skill teaching for entry-level medical students: does knowledge of empathy increase? Med Educ 2000; 34: 90-94.

Data are expressed as number (%).

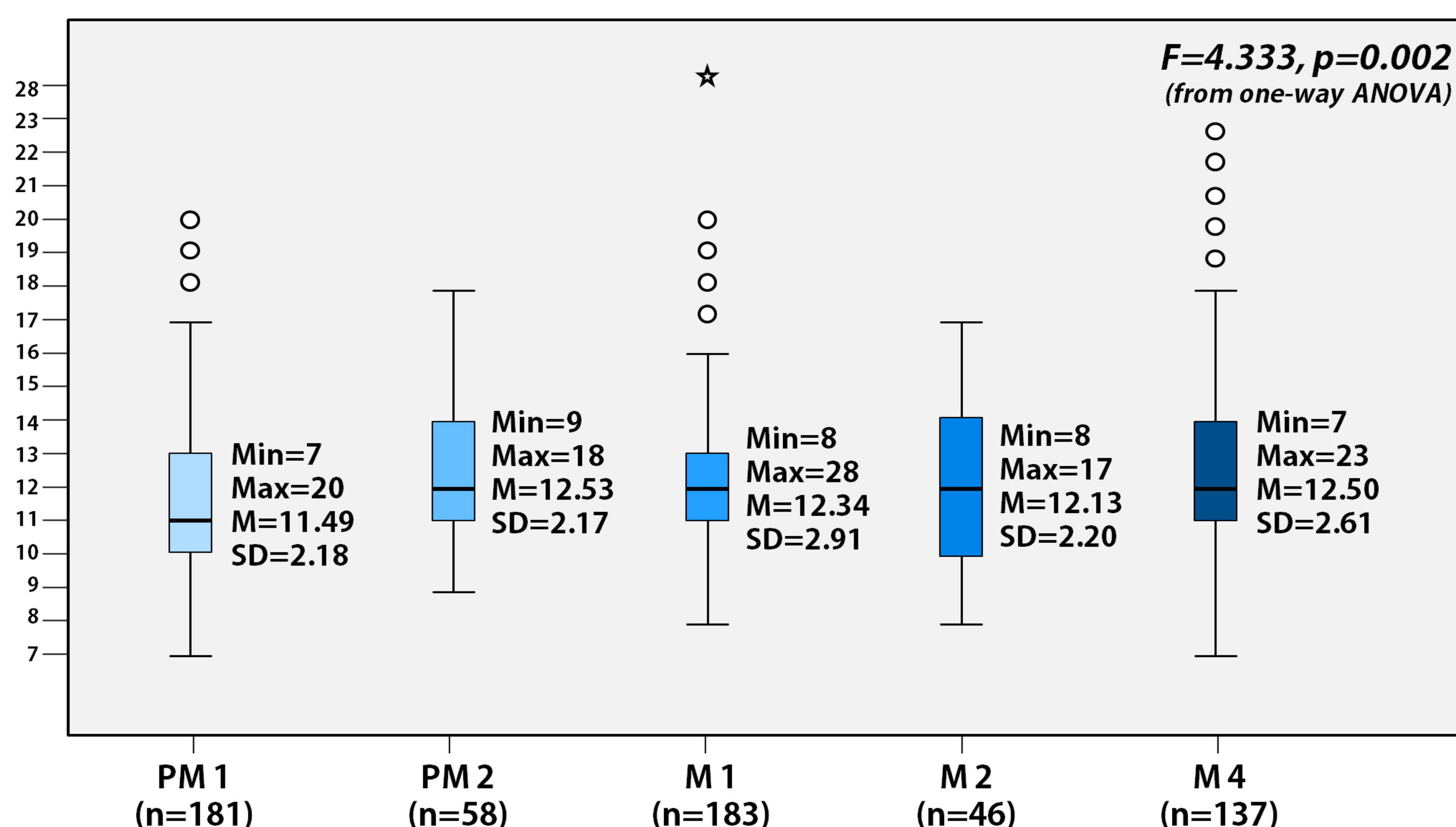
### 2. Difference by Genders



### 3. Difference by School Systems



### 4. Difference by Academic Levels



## Discussion/conclusion

Even if they recognize the importance of empathy but cannot express it with words or deeds, they cannot be regarded to have sufficient capabilities for that. Though the students' skills to express empathy did differ slightly by school system, academic level, and gender, most of them were found to be "non-empathetic". Our results suggest that practical training in expressing empathy should be included in medical education and that an empathy training program must be focused on changes in behavior.