# Personal values as predictors of medical students' empathy



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# Introduction

The concept of values involves different dimensions and can be explained from different perspectives. In general, they refer to basic convictions regarding what is desirable, moral, right, good or not and what are the individual interests, goals, and needs [1].

This study is focused on the Basic Human Values derived from the Schwartz's theory [2]. Across the different theories of values [1,3,4], the Schwartz' theory makes discrimination among individuals instead of cultures and it is tested, cross-cultural validated, and well-studied.

The theory of values has been shown to influence a wide range of human behaviors, including the caring ones [5,6]. However, little is known about the specific relationship between personal values and the empathetic attitude in medical students.



Schwartz's circumplex model of Basic Human Values

# Results

#### **GENDER DIFFERENCES:**

- Male students scored higher in Enhancement scale (t = -5.25; p < 0.001) and Openness to Change (t = 3.81; p < 0.001)
- Female students had higher levels of Self-Transcendence (t = -5.09; p < 0.001) and Conservation (t = -3.01; p = 0.003) dimensions.

ASSOCIATION BETWEEN PERSONAL VALUES AND EMPATHY after controlling for gender and age of students:

- EC: positively predicted by Self-Transcendence (B = 0.433; p < 0.001)
- $\mbox{PT}$ : negatively predicted by Self-Enhancement ( $\beta$ = -0.407; p < 0.01), Conservation ( $\beta$  = -0.361; p < 0.05), and Openness to Change ( $\beta$  = -0.484; p < 0.01)

The purpose of this study was to assess personal values in a sample of Italian medical students an to investigate to what extent empathy dimensions could be predicted by value priorities.

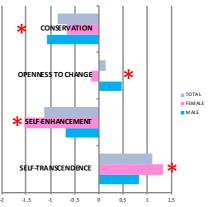
# **Materials**

Portrait Values Questionnaire-40 (PVQ-40): according to the Schwartz's theory of basic human values, the Italian version [7] of PVQ-40 [8] was employed to assess the medical students' values'

- SELF-TRANSCENDENCE (Benevolence and Universalism);
- SELF-ENHANCEMENT (Achievement and Power);
- **OPENNESS TO CHANGE** (Self-direction, Stimulation, and Hedonism);
- CONSERVATION (Conformity, Tradition, and Security).

Interpersonal Reactivity Index (IRI): emotional and cognitive domains of empathy were assessed using the IRI [9,10]. The IRI consists of 28 items divided into four subscales

- EMPATHIC CONCERN (EC) feelings of sympathy and apprehension for adversities of other people
- PERSONAL DISTRESS (PD) feelings of personal anxiety and worry in stressed interpersonal
- PERSPECTIVE TAKING (PT) natural propensity to assume the psychological point of view of others
- FANTASY (F) persons' tendencies to feel like fictional characters in movies, plays, and books.



T-test revealed significant gender differences in all value priorities.

	MODEL			SELF-TRA		SELF-EN		CONS		OPEN	
	R <sup>2</sup>	F	р	β	р	β	р	β	р	β	р
EC	.19	39.397	< .001	.433	< .001						
PD	.052	8.428	< .001								
PT	.19	28.967	< .001			407	.003	361	.015	484	.006
F	.004	6.795	< .001								

Associations between basic human values and empathy dimensions

# **Methods**

398 second-year students (female = 207; main age = 19.93 year, SD = 1.39) from an Italian Medical School

Students were recruited at the beginning of their second year, were approached after class and invited to participate in the study. The recruitment of participants and the administration of the paperand-pencil survey took about 30 minutes.

T-test and multiple hierarchical linear regression models were performed in order to evaluate. respectively, the gender differences in students' values scores and the relationship between basic human values with empathy dimensions.

# Discussion

The specific interest of the study was to explore whether personal value priorities contribute to empathy scores when entered after gender and age variables

VALUE RANKINGS: Self-Transcendence value was the most important value type in our sample, followed by Openness to Change, Conservation and

GENDER DIFFERENCES: Male medical students scored higher in self-promotion values and Openness to Change dimension, while female students were more disposed to conservation and to transcend selfish interests.

RELATIONSHIP BETWEEN VALUES AND EMPATHY: high levels of Self-Transcendence values were related to high levels of concern for adversities of other people. Moreover, the medical students' tendency to adopt the psychological point of view of others was significantly and negatively predicted by personal values scores.

# Take-home message

During the pre-clinical years, medical educators should develop assessment and educational strategies to improve students' awareness about their personal values since they are early predictors of emotional and cognitive empathy.

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