

# Attitudes Toward Plagiarism Among PhD Medical Students in Serbia

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**Abstract.** In this cross-sectional survey the Attitude Towards Plagiarism (ATP) questionnaire was administered to 100 PhD students to measure their attitudes towards plagiarism. The results showed that the students had low scores for positive attitudes and subjective norms, but moderate scores for negative attitudes towards plagiarism. Additional courses on plagiarism should be introduced in PhD studies to promote responsible research practices in Serbia.

**Keywords.** Plagiarism, PhD students, medicine

## 1. Introduction

Plagiarism is the act of presenting someone else's words, ideas, or work without proper attribution or permission [1]. It is considered a serious academic offense and can result in consequences such as legal action, loss of reputation, and exclusion from the academic community [2]. The aim of this study was to assess PhD medical students' attitudes towards plagiarism and to test the psychometric properties of the Serbian version of the Attitude Towards Plagiarism (ATP) questionnaire in order to acquire a valid instrument to measure attitudes inside the Serbian educational context.

## 2. Methods

The ATP questionnaire was administered anonymously to first year medical students attending PhD studies at Faculty of Medicine University of Belgrade during 2022/23 school year. The ATP questionnaire is a standardized survey tool used to measure individuals' attitudes and beliefs towards plagiarism [3]. It consists of a series of statements related to plagiarism, to which respondents rate their level of agreement or disagreement on a five-point Likert scale. The questionnaire measure three attitudinal factors: 1) positive attitude, reflecting the approval of plagiarism, 2) negative attitude, reflecting the condemnation of plagiarism, and 3) subjective norms, indicating personal view of the acceptance of plagiarism in the academic community. Low scores for positive attitudes and subjective norms, and high scores for negative attitudes indicate

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favorable attitudes. The research was conducted according to the principles of good research practice, with full preservation of data confidentiality. Internal consistency of the Serbian version of the ATP was assessed by Cronbach's alpha coefficient. Statistical analyses were performed using the R environment for statistical computing.

### 3. Results

The ATP was completed by 100 PhD medical students (out of 203 who entered PhD studies, response rate 49.3%), predominately female (63.0%). Students who were not active at the time of survey were excluded from the analysis. Analysis of internal consistency yielded a Cronbach's alpha of 0.775, indicating satisfactory scale reliability. Students presented low scores for positive attitudes and subjective norms subscale, and moderate scores for negative attitudes subscale. Significant differences were found for attitudes toward plagiarism according to sex, with female PhD students presenting lower scores for positive attitudes and subjective norms subscales. No correlation was found between age and attitudes towards plagiarism subscales scores.

**Table 1.** Average scores measuring attitudes toward plagiarism, total and according to gender and age.

Subscales	Score		Gender		p	Age	
	mean±sd (n=100)	Categories	Male (n=37)	Female (n=63)		r	p
Positive attitude	26.3±7.2	Low*	29.1±6.9	24.6±6.9	0.002	-0.128	0.239
		Moderate					
		High					
		Low					
Negative attitude	24.1±2.9	Moderate	23.7±2.8	24.4±2.9	0.252	0.128	0.241
		High*					
		Low*					
		Moderate					
Subjective norms	22.7±5.3	Moderate	24.5±5.5	21.7±5.0	0.011	-0.056	0.609
		High					

\*Favorable attitude

### 4. Discussion and Conclusions

First year PhD medical students' attitudes reflected favorable level of self- and community-based awareness with which plagiarism is perceived. However, because of insufficient level of condemnation of plagiarism, introduction of additional courses on plagiarism into the PhD studies might be considered to help promote academic integrity and responsible research practices in Serbia. The Serbian version of ATP questionnaire can be used as standardized research instrument to help identify and address attitudes and misconceptions about plagiarism in Serbia.

### References

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