

The role of students' personality characteristics in the implementation of scientific research

Natalia Moskvicheva, Svetlana Kostromina
Saint Petersburg State University, Russia

Introduction

The substantial contributions of students' cognitive features and motivation to the success of students' research were defined in many studies. However, the role of their personality, values, and subjective representations of research stages were often remained outside the issues.

The purpose of our study was to explore students' representations and attitudes toward different stages of a research work, and to reveal interrelations between students' attitudes toward research stages and their personal traits and values.

We put the following research questions:
Are there distinctions between students' attitudes toward different stages of a research work?

What personality traits and values lead to preference or underestimation of certain stages of a research?

Methods

The sample: 75 students of the fourth year of study of St. Petersburg State University, Philosophy Faculty (mean age 22.9±1.3; 48 women /27 men).
The instruments: the questionnaire, with further content analysis of data; seven ten-point scales for the students' assessment of the different stages of a research work; The Big Five Personality Test (5PFQ form by H. Tsuji), and Rokeach Value Survey (RVS).
Descriptive analysis, Kendall tau rank correlation coefficient, and Mann-Whitney U test were applied.

Results

Students gave the higher assessment to the stages of "Reflection", "Data analysis", "Data collection", "Definition of the scientific field", and the lower assessment to the stages of "Planning," and "Determination of methods and tools".

Stage of research	Mean ± SD
Reflection (awareness and analysis of process)	7.30 ± 1.96
Data Analysis (description, comparison, etc)	7.12 ± 2.35
Data Collection (or conducting an experiment)	6.70 ± 2.58
Orientation (definition of the scientific field)	6.32 ± 2.28
Problem statement (identifying of problem)	6.03 ± 2.41
Planning (determining the sequence of tasks)	5.52 ± 2.09
Determination of methods and sampling	4.85 ± 2.01

Fig.1. The correlations between personality traits and students' assessment of research stages

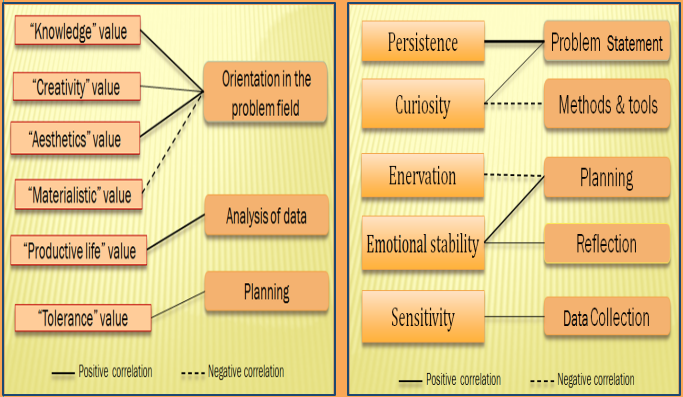


Fig.2. The correlations between the students' values and attractiveness of the research stages

Conclusion

The attitudes of the humanities students toward different research stages are not homogeneous; it can be assumed that students estimated lower those stages which caused difficulties (planning and methodology).

Students' personal traits and prevailing values correlate with the attractiveness of a research stages: curious and persistent students prefer "Statement of problem"; emotionally stable students prefer "Planning" and "Reflection", etc.; Knowledge, Creativity and Aesthetic Values correlate with preferring "Orientation in the problem area", Value of Productive life correlate with "Analysis and description of the results", etc.

References

- Kostromina, S., Bordovskaia, N., Rosum, S., Moskvicheva, N. & Iskra., N. (2014). Research potential and cognitive features of students // Psychology in Russia: State of the Art. Volume 7, Issue 4, PP. 122-136.
- Moskvicheva, N. L. (2012). Analysis of motivation in students' research activity // 4th International Conference on Education and New Learning Technologies Proceedings. Barcelona, PP. 2576-2884.
- Bordovskaia, N.V., Kostromina S. N. (2013). Personal features and research potential of students // The European Journal of Social & Behavioral Sciences, Volume VIII, PP. 1284-1293.