THE PHENOMENOLOGICAL INTERVIEW: EXPLORING (MATH) PHILIA AND PHOBIA

Anita Pipere, Daugavpils University, Parades 1-432, Daugavpils LV 5400, Latvia.
E-mail: anita.pipere@du.lv
Romualdas Kašuba, Vilnius University, 3 Universiteto St. Vilnius LT 1513, Lithuania.
E-mail: romualdas.kasuba@mif.vu.lt

This presentation will reflect on the phenomenological research in psychology, focusing on the attitudes toward mathematics. The relationships with mathematics will be presented from the point of view of single person who has the unique configuration of social identities connected to math education and research in math education.

In order to provide the theoretical background for the further study, we will look into the definitions of general attitude toward mathematics (e.g., Hannula, 2002), math anxiety (Legg & Locker, 2009; Bai, Wang, Pan, & Frey, 2009) or phobia and math philia coming from Aristotles' friendships of utility, friendships of pleasure and friendships of the good as the motives for philia.

The urgency of research theme stems from the recognition of importance of subjective phenomena and their interpretations in relation to science issues and science education. Besides, the traditional emphasis in the quantitative survey studies on relationships with math makes the ideographic perspective from this field look even more valuable. As well, unlike many studies using the qualitative paradigm, this research obtains the data from the research participant with the unique and multiple perspectives on the research topic. In this interview we move from simple experiential acts to more extended social, historical involvements, all of which currently lack "ontological security" (Giddens, 1991) in Latvian society.

The real-life experience of one woman's personal history as ex-student, ex-teacher of mathematics and ex-principal at school, current university teacher and doctoral student was obtained through the semi-structured interview, which lasted for 90 minutes. The Interpretative Phenomenological Analysis (Smith & Osborn, 2008) was applied involving detailed examination of the participants' personal perception of the research object and making sense of it by both a participant and a researcher. With the permission of a participant the interview was taped and transcribed. Emergent themes were clustered and narrative account was created following the main themes. The interview schedule was built in a way that would also allow discerning the interpretative repertoires from the philosophical, psychological, educational perspective as well as from the practitioner, researcher's and personal point of view.

The results of this study, among other things, could be helpful in order to create the questionnaire, which measures teachers' attitudes toward mathematics in Latvia. Directions for future research and educational practice will be considered during the presentation too.

References:

Hannula, M. (2002) Attitude towards mathematics: Emotions, expectations and values. *Educational Studies in Mathematics, 49, 25-46.*

Bai, H., Wang, L., Pan, W., Frey, M. (2009) Measuring mathematics anxiety: Psychometric analysis of a bidimensional affective scale. *Journal of Instructional Psychology, 36(3), 185-193.*

Legg, A.M., Locker, Jr., L. (2009) Math performance and its relationship to math anxiety and metacognition. *North American Journal of Psychology, 11(3), 471-486.*

Giddens, A. (1991) *Modernity and self-identity: Self and society in the late modern age*. Stanford, CA: Stanford University Press.

Smith, J.A., Osborn, M. (2008) Interpretative phenomenological analysis. In Smith, J.A. (Ed.) *Qualitative psychology: A practical guide to research methods. 2nd ed. (pp. 53-80).* SAGE publications Inc.