

# STATEMENT

by Assoc. Prof. Lilia Alexandrova Gurova

New Bulgarian University, professional field 2.3. Philosophy,  
for the thesis of Gergana Kuzmova

*Decision-Making Under Negative Affect and the Threat of Being Out of a Group*  
submitted in partial fulfillment of the requirements for the degree of Ph.D. in Psychology

The dissertation of Gergana Kuzmova (original title in English: *Decision-Making Under Negative Affect and the Threat of Being Out of a Group*) presents the results of a study of social rejection and its influence on decisions for cooperation in the context of a social dilemma. The study has been partially motivated by the controversial results found in previous research: e.g. the results obtained by Twenge, Ciarocco, Cuervo & Baumeister (2003) showed that ostracized participants tended to cooperate while Buckley, Winkel & Leary (2004) provided evidence for aggressive response to perceived social exclusion. The study of Gergana Kuzmova (a set of 4 interconnected experiments) does not resolve this controversy. The obtained results do not confirm unambiguously the expectation for increased cooperation under the threat of being out of a group. Nevertheless, these results can be viewed as an important contribution to the current discussion insofar as they reveal dependencies, which provide sufficient reason for continuing the research on the interplay between social rejection, negative emotions, specific personality traits and the willingness to cooperate.

I would summarize the main merits of the presented study as follows:

- The author of the study demonstrates a thorough knowledge of the available literature on ostracism and, accordingly, a knowledge of the history of the concept of ostracism, the various manifestations of social phenomena, which this concept stands for, the relationship between ostracism and social norms, the differences in individual approaches to deal with situations of social rejection, as well as a knowledge of research focused on the relationship between social rejection and the accompanying emotional experiences. Studies of people's behaviour in the face of social dilemmas, such as the famous prisoner's dilemma, are also competently

presented. This broad knowledge base has been used skilfully in formulating the main research questions and as a starting point for discussion of the obtained results.

- I would like to pay particular attention to the overall design of the study. The 4 experiments are coupled so that each subsequent experiment is in a sense a "conceptual replication" (replication with modification) of the previous one, insofar as the main dependent variable (cooperation in consecutive prisoner's dilemma games) is the same in the four experiments, and the differences are mainly in the way of manipulation and measurement of the dependent variables "ostracism", "mood", and "action orientation". This design makes it possible to identify persistent trends in the relationships between the main variables studied against the background of incidental outcomes that require further verification.
- The efforts made by the student and the skills she demonstrated in the development of the tools and stimuli used in the realized research are impressive. I would especially highlight the creation of a special interface in *MATLAB*, which allows the inclusion of three participants in the computer version of the prisoner's dilemma game for the purposes of experiment 2 and the construction of 6 stories of the same length (189 words each) with the idea to disentangle the effects of rejection and negative emotions in experiment 4.
- A distinction of the work is the detailed and appropriately systematised general discussion, which delineates well the problems faced by the presented study and frankly comments on the possible reasons for not confirming the basic expectation about the impact of social rejection on the decision to cooperate in a social situation.

In the context of what has been stated above, I accept the three major contributions made by the dissertation: theoretical, empirical and methodological.

The five publications submitted by Gergana Kuzmova on the topic of the dissertation in peer-reviewed editions are sufficient to satisfy (and exceed) the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria.

In a critical vein, I would point out some minor flaws in the otherwise well-presented description of the results of the four experiments, which Gergana Kuzmova has conducted:

- In Experiment 3, in addition to hypotheses H1-H3, which were tested in the previous two experiments, hypothesis H4 related to the use of a questionnaire to

evaluate ostracism in the two experimental groups was tested. This hypothesis is not included in the summary of the four experiments in Table 13 (p. 138-140).

- In the same Table 13, the two analyses of the SH6 test results are unnecessarily presented separately (in two different rows), which gives the reader the initial impression of a technical error (that the SH6 hypothesis is presented twice).
- The exact values of  $p$  are not everywhere given, as are the current requirements for the presentation of the results of statistical analyses (in particular, the results of NHST); it is indicated only if  $p > (<) 0.05$ . (See pp. 63, 68, 86, 96-97, 99, 111, 115, 118, 138).

I also have one question for Gergana Kuzmova that I will be glad to receive an answer of during the public defence:

- At the beginning of Chapter Three (p.53), it is stated that the planned study is based on the model of Hirshlifer & Rasmussen (1989) about the relation between ostracism and cooperative behaviour, in which model the emotions play the role of a mediator. However, the results obtained (in particular, the results of Experiment 1) do not support the assumption of this model for the mediating role of emotions, because: (1) an association is found between ostracism and mood, and between mood and cooperation, but not between ostracism and cooperation; (2) the associations between ostracism and mood and between mood and cooperation have different valences: ostracism leads to negative emotions, but it is positive emotions (*joy*) rather than negative emotions that correlate with the willingness to cooperate (see p. 66). Given these results, isn't it more plausible to assume that emotions play the role of a moderator rather than of a mediator of the effect of social exclusion on cooperation? Can we test this assumption only by a statistical analysis of the data collected without the need to conduct new experiments?

In conclusion, taking into account the demonstrated outstanding professional competence and the contributions contained in Gergana Kuzmova's dissertation and related publications, I confirm that the applicant fully complies with the requirements for the award of the educational and scientific degree "doctor" in the professional field 3.2. Psychology, formulated in the Law for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for

the Development of the Academic Staff of NBU. I hereby propose Gergana Ilieva Kuzmova to be awarded a PhD in the professional field 3.2. Psychology.

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(Assoc. Prof. Lilia Gurova)