

AN INTERDISCIPLINARY ANALYSIS OF YOUTH FAMILY VALUES: PSYCHOPHYSIOLOGY AND SOCIOLOGY

V.A. Demareva

Russia, Nizhny Novgorod, Lobachevsky State University, kaleria.naz@gmail.com

S.A. Sudin

Russia, Nizhny Novgorod, Lobachevsky State University, sudjin@mail.ru

R.V. Golubin

Russia, Nizhny Novgorod, Lobachevsky State University, golubin-roman@mail.ru

T.P. Bobro

Nizhny Novgorod Institute of Education Development, btppnn@mail.ru

- **1. Introduction.**

- The promotion of family values among young people has become one of the targets of current constitutional reforms in Russia as a key to solving basic problems of present-day Russian society. Traditionally, social diagnostics and the study of attitudes of individuals and groups use methods and approaches of sociology and social psychology; the activity aspect realized via social work and social policy. The use of psychophysiological methods and neurocognitive techniques may promote the interdisciplinary nature of the topic and allow an implicit investigation of foundational and emerging conceptions of family values in different social groups. The study of family values with a combination sociological and psychophysiological tools should showcase an interdisciplinary synthesis which helps to identify the most effective ways to cultivate family values and family identity, but also to objectify their subjective significance with the help of digital psychophysiological tools.
- The main purpose of the pilot study was to find hidden intentions behind young people's evaluative judgements on family values.

- **2. Method**

- Thirty informants (10 male, 20 female) in the age range of 18-25 years, which was defined as “Youth”, took part in the study.
- The stimulus material contained 22 questions compiled by sociology experts at the Faculty of Social Sciences of Nizhny Novgorod Lobachevsky State University. Prior to the experiment the participants were asked to sign an informed consent form and fill out two background questionnaires on their demographics and on family values.
- In the main session of the experiment, the eye movements of the participants were recorded while they were surveyed on the family values questionnaire again. The participants had to fixate the answer option of their choice. No response timeout was set. After a three-minute fixation on one of the option, the system automatically moved to the next question. On average, the main experiment took 4 to 5 minutes.
- The participants’ eye movements were recorded with the help of a desktop infrared video-based eye tracker SMI Hi-Speed 1250, which determines eye movements’ direction based on putting the vector between the pupil center and the corneal highlight: the so-called «pupil-corneal reflex» system. SMI Hi-Speed 1250 provides mono (1250 Hz) and binocular (500 Hz) high-speed registration of eye movements with the accuracy of 0.25° and 0.5° respectively, the resolution of less than 0.01° , with the linear range of $\pm 30^\circ$ horizontally, 30° vertically up and 45° down, and the system latency of less than 2 ms. The participants were seated at a distance of around 70 cm from computer screen, the display size was 502 mm (37°) horizontally and 412 mm (30°) vertically. The screen resolution was 1680x1050 px.
- Frame boundaries of the data readout, the threshold for the pupil diameter and the size of the specular highlight were adjusted where necessary. The experiment started with the standard 9-point calibration, which was passed at an error of less than 0.5° , drift corrections were performed prior to each trial. The stimuli were presented using iView X and Experiment Suite; SMI BeGaze was used to visualize and download the eye-movement data.
- Qualitative and quantitative data analysis was conducted. Response distribution by gender was calculated based on the paper-and-pencil questionnaire. The eye movement trajectory was visualized in Scan Path for each subject and item. Then, the time intervals corresponding to the breakdowns and transitions between the lines were marked. Total viewing time was calculated by gender for individual answer options for each question taken separately based on the eye tracking questionnaire data.

- **3. Results and Discussion**

- Response mismatch on the paper-and-pencil and the eye-tracking questionnaire for men and women was evidenced for the following questions:
 - - "I want to have three children."
 - - "I do not accept homosexual marriages".
 - - "Cohabitation without official marriage can be considered a family".
 - - "Sexual relations are the main component of family life".
- The eye movement pattern for the question "I want to have three children," revealed that women mostly commit themselves to extreme responses "Completely disagree" and "Completely agree," while men attend to "Completely disagree." On the paper-and-pencil questionnaire, women mostly selected the "undecided" option, the typical response for male participants was "Rather Disagree." That is, the response patterns of male participants converge for the paper-and-pencil and the eye tracking questionnaire while female responses on the paper-and-pencil version did not reflect what they really think.
- For the question "I don't accept same-sex marriage," the pattern is as follows: Average fixation time for male participants was evenly distributed across the choices provided. For female participants, extreme responses were registered. By contrast, on the paper-and-pencil questionnaire, women almost never answered that they "Strongly Agree," while male participants did not evidence any strong commitment to one particular response possibility. With regard to women's behavior, one can conclude that they appear to be tolerant on the paper-and-pencil questionnaire, but their eye-tracking data do not confirm this result.

- For the question "Cohabitation without official marriage can be considered family," men tended to fixate the "Strongly disagree" response while women entertained the "Rather agree" option. On the paper-and-pencil questionnaire, women again preferred the "Rather Agree, option while male participants ranged between "Rather Agree" and "Completely Agree." Therefore, though men agree that unmarried cohabitation is a family on the paper-and-pencil questionnaire, they gaze longer at the disagreement response on the eye tracking questionnaire.
- For the question "Sexual relations are a major component of family life," men gaze longest at the "Strongly disagree" and the "Rather agree" responses while women consider all response options with equal viewing time. On the paper-and-pencil questionnaire, men generally "Strongly Disagree" and "Rather Agree," while women give preference to the "Rather Disagree" Response. Thus, it seems that women give a socially approved answer on the paper-and-pencil questionnaire.
- The reported study was conducted withing the RFBR-funded research project № 20-011-31670.

Спасибо за внимание