

**Erzsébet Németh PhD\* and Ágnes Sima MD\*\***

**Paper title:** Gender differences in a competitive situation

## **Abstract**

### Objectives

The aim of our series of investigations was to examine the complex behavioural and attitudinal changes caused by rewarding as an external stimulus. Within the framework of the study we wished to establish whether there were any gender differences in reactions to interventions including external stimuli.

## **Method**

Subjects: 226 six and seven-year-old children.

Study material: A set of hand-drawn illustrations. The illustrations were designed to include eight easily identifiable and eight not so easily identifiable differences in each.

Description of the study: The children's task was to put a circle round the differences on the illustrations they were given. The task was the same for all the children, but they were divided into four groups in respect of rewards:

- The first group was not given any rewards.
- The second group received a plastic counter for each correct answer.
- The third group could draw from a "lucky dip" every five score.
- The fourth group got feedback on their achievement. The results were written in red felt-tip pen on an 'A0'-size piece of paper fixed to the black-board.

After completing the first task the children could choose whether to go out to play in the school-yard or ask for another similar exercise. The children were told that no reward would be given for further correct solutions.

Measurements: The degree of intrinsic motivation is shown by the spontaneous activities performed without any rewards. Our measure of achievement was the number of correctly identified details in the first task.

## **Results**

Reward decreases intrinsic motivation but improves achievement. This correlation is strengthened by the conspicuousness and desirability of the reward. Gender correlates with the change in intrinsic motivation resulting from rewards in that in the groups stimulated by achievement feedback the girls lost their interest in and positive attitudes to the task to a significantly smaller extent than the boys, whereas the gender of the subject did not affect performance of the task. Out of our four experimental arrangements, the one including stimulation with achievement feedback was the only one where girls and boys showed different behaviours.

## **Conclusion**

We, referring to the literature data, interpret this as being due to the greater social inclination and empathy typical of females, in contrast with males' typically greater inclination towards facts and higher motivation to achieve. Boys very clearly want to win, and enjoy competition in itself;

consequently the competitive situation is more likely to distract their attention from the interesting features of the basic task, and they will also more often respond to the withdrawal of the stimulation by abandoning the task. The possibility of winning does not, however, necessarily give rise to positive feelings in girls. For them, defeating somebody may, besides pride, mean social danger, and may give rise to anxiety, so that the withdrawal of feedback is partly a relief and they are therefore less likely to react to it by abandoning the task.

## **INSTITUTIONAL AFFILIATION**

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## Biography

**FAMILY NAME:** Németh, PhD.  
**FIRST NAMES:** Erzsébet  
**DATE OF BIRTH:** November 13, 1961  
**NATIONALITY:** Hungarian

### EDUCATION

1999. PhD. psychology science, Kossuth Lajos University of Debrecen  
1993. Psychologist, Eötvös Loránd University of Budapest  
1986. special education teacher, speech therapist, Bárczi Gusztáv Special Education Teachers' Training College

### KEY QUALIFICATIONS:

psychologist, speech therapist, communication trainer

**PRESENT POSITION:** **associate professor**, Semmelweis University Institute of Behavioural Sciences

### DETAILS OF ACADEMIC ACHIEVEMENTS

number of articles referenced:	<b>30</b>	
including	published in journals abroad (without conference abstract):	7
	published in a domestic Hungarian language journal:	23
number of presentations at international conferences:	<b>19</b>	
number of monographs:	<b>10</b>	
number of monograph chapters:	<b>9</b>	

### FIELDS / AREAS STUDIED

Communication and Social Skills Training for Peer Helpers  
Pedagogical and social psychological dilemmas of external stimulus application  
Public speaking and mass media

## **CURRICULUM VITAE FORM**

### PERSONAL INFORMATION

Name  
E-mail  
Citizenship  
Date of birth

ÁGNES SIMA MD  
simagi@net.sote.hu  
Hungarian  
21.01.1954

### EMPLOYMENT

- Duration
- Employer's name and
- Occupation, position
- Main responsibilities

**1993-**

**Semmelweis Medical University, Dept. Of Public Health,  
Research fellow  
Public health research, education, dean of students for Public Health**

### EMPLOYMENT

- Duration
- Employer's name and
- Occupation, position

**2003-**

**National Institute of Psychiatry and Neurology,  
Physician, trained psychotherapist**

### EDUCATION

- Duration
- Educational facility's

**1998-2004.**

**Semmelweis Medical University, Dept. Of Public Health**

- Professional degree earned

**Public health and preventive medicine specialist**

### EDUCATION

- Duration
- Fields / areas studied
- Professional degree earned

**1997-2002.**

**120 hrs of theoretical training, 3 years of practice  
Trained in psychoanalytically oriented psychotherapy**

### EDUCATION

- Duration
- Educational facility's
- Fields / areas studied

**1993-1997.**

**HIETE (HIETE University of Health Sciences)  
Population health status and information system, social environment and  
prevention  
Social hygiene specialist**

- Professional degree earned

## **AREA OF DISCUSSION**

### **Facing impact: Society and biotechnology**

- possible effects of current research on society at large