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REPORT ON PARTICIPATORY WORKSHOPS ON MAGIC AND ILLUSIONISM AND INTERVIEWS WITH THE PARTICIPANTS

Material developed by CRAS-Association (CRAS - Centrum Rozwoju Aktywności Społecznej (Social Activity Development Centre)) as part of the project: "We need illusions more than reality"



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INTRODUCTION

This report concerns a summary of participatory workshops in the field of magic and illusions conducted by the CRAS Association, according to the assumptions of the “We need illusions more than reality” project, and research on the participants.

The report includes a description of the experiment, the research methods used, and the characteristics of the group of participants. An analysis of the answers and a description of the behaviour of the participants during the study has been also included.

The analysis also includes conclusions of the study and its summary.



DESCRIPTION OF THE STUDY

Workshops among a group of schoolchildren aged 15-18 years were conducted in order to study the possibility of using magic and illusion in education. 19 people took part in the study.

The aim of the experiment was to discover the participants' reactions to a magic show, to observe their behaviour, emotions, and their opinion about taking part in the show.

The meetings were organised in the form of illusion shows in 1:1 format. The presenter showed illusions – two magic tricks. Coins were used in the first one, and a deck of cards in the second.

After the show, a survey was conducted in the form of interviews, which were recorded. A transcription of the recordings was made after finishing the interviews.

The research tool used was an interview questionnaire.

The study was conducted in the form of a casual conversation with the respondent which was moderated according to the scenario.

The interview started by asking the respondent to introduce themselves, i.e. to give their name and age.

Next, they were asked about their reflections and feelings regarding the illusion show.

A personalised approach was used, adjusting the form of communication to a particular person.

The interview was conducted in such a way as to obtain answers to the following questions:

1. Did you experience this experiment as fun or as an unusual event?
2. What did you feel when the magic happened?
3. What did you want to do?
 - a. to have more time for reflection,
 - b. to perform the trick on your own, to stop, verify the process, to touch the props
 - c. to obtain more information about the event.
4. What did this experience leave you with? Do you want to see more magic tricks?
5. Do you understand how this happened? (if the answer is Yes, please, explain it briefly).
6. Do you want to know the rules for performing tricks? Why?

The task of the interviewer was to create a relaxed, casual atmosphere, and to build a positive relationship with the respondent. Thanks to this, conditions enabling a proper examination of the study were developed.

The young people eagerly gave information, engaging in dialogue. Most of them enthusiastically entered into relationships.

During the conversations, the interviewer asked additional questions, interacted with the respondent, among others, by encouraging them to name their emotions, expand their thoughts, etc. The interviewer stimulated the respondent to answer by using paraphrase and clarification.

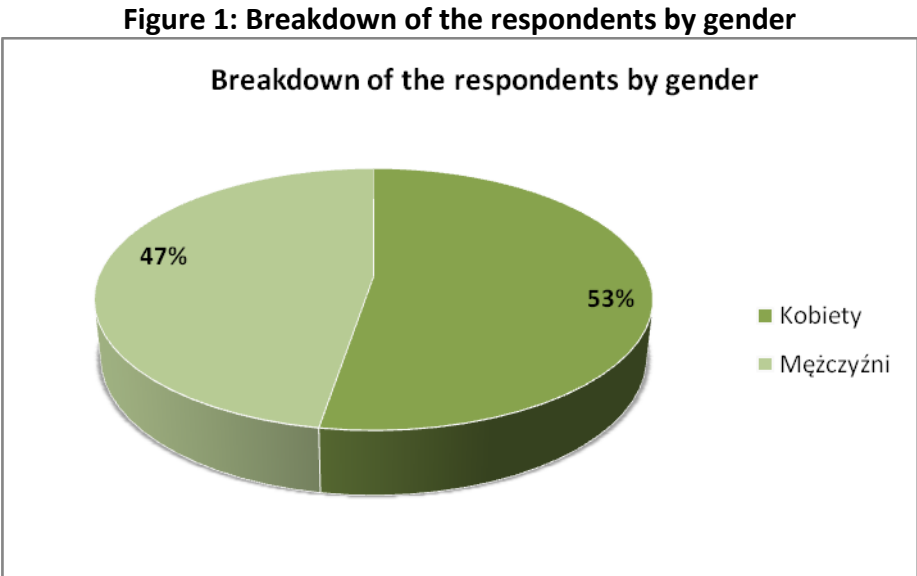
The aim of such a way of working was to obtain the most comprehensive answers possible. Using this method was necessary due to the specificity of communicating with young people.

CHARACTERISTICS OF THE RESPONDENTS

19 people participated in the study.

Among the respondents, females – 53% slightly outnumbered males – 47% of the respondents.

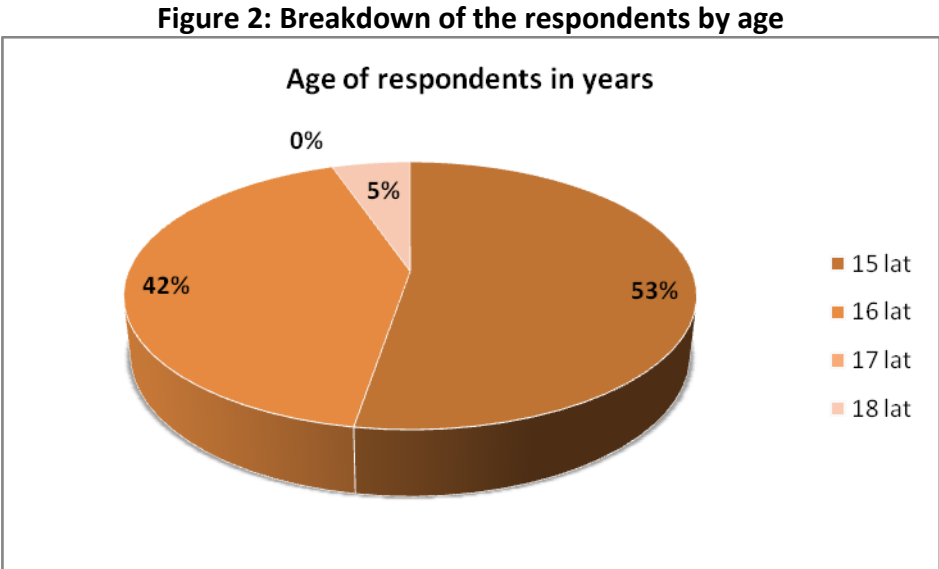
Figure 1 presents the breakdown of the respondents by gender:



Source: Own elaboration

The respondents are aged from 15 to 18 years. The most numerous group were aged 15 years – 53%, and aged 16 years – 42% of the whole group. The least numerous group taking part in the study were people aged 18 years – 5% of the group. There were no people aged 17 years among the respondents.

Figure 2 presents the breakdown of the respondents by age:



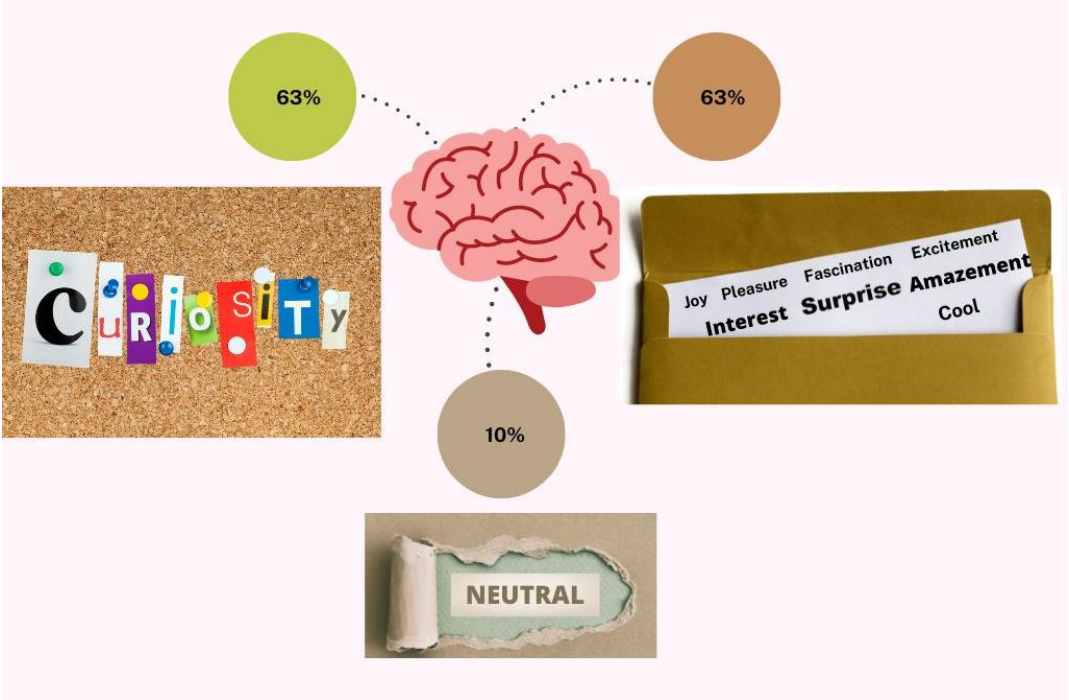
Source: Own elaboration

YOUNG PEOPLE’S REACTION TO THE SHOW

The “live” illusion show evoked strong and diverse emotions amongst the young people who participated in it. The researchers observed young people waiting to participate in the event, during the event, and immediately after leaving the room. They could see general excitement, curiosity and confusion that accompanied the anticipation. The young people’s behaviour changed after leaving the room. Most of them expressed their emotions more expressively, did not hide their reactions and shared their impressions with other people. It was clear that the young people were excited (louder tone of speech, gesticulation stronger than earlier).

When asked *what* the respondent felt/experienced during or soon after the show, the most frequently mentioned emotion/feeling was *curiosity*. It appeared in as much as 63% of the respondents’ answers. *Curiosity* was listed as the main or one of the main feelings evoked by the show. Emotions other than *curiosity* listed by the respondents are as follows: *shock, interest, excitement, fascination, surprise, joy*, together with a statement that this experience was *cool and pleasant*. In total, the above-mentioned emotions appeared in 63% of all answers. A minority of the respondents declared that the show did not evoke any emotions or interest them. Such indications equal 10% of all the answers. Figure 3 shows a graphic presentation of the data.

Figure 3: Emotions evoked by the show among the respondents



Source: Own elaboration

47% of the respondents mentioned one emotion each, the remaining 53% indicated more than 1 emotion (2, 3 or more), which gave a total of 32 answers in which particular emotions were repeated. In total, the respondents mentioned 9 different emotions that the show evoked in them.

The collected data show that the illusion show was a positive, relatively neutral experience for the young people.

The *curiosity* that appeared in the description of the respondents' feelings in different versions was caused by the mysteriousness of what was presented to them.

This is very important and positive information. The observed relationship shows that teenage youth can still become curious, interested and engaged in something. And this despite the unlimited information and entertainment resource that young people have access to and the countless stimuli that they are exposed to every day, from both the real and virtual worlds.

This observation is all the more valuable because the young people attending the show were aware of the reality of the situation and the fact that the tricks shown have nothing to do with supernatural magic, but are the result of the work and cunning of an illusionist.

The young people said: "I don't believe in illusions or anything like that", "everything can be explained sooner or later", "I was prepared for it to be an illusion of some kind".

These statements are an expression of their rational thinking and scientific approach to the subject, as well as their awareness that magic, understood as an *extraordinary force of influence, something inexplicable and supernatural*, simply does not exist. There is, however, a show, a spectacular event, skilfully conducted by a professional who is able to charm, sometimes even manipulate, the viewer, diverting his attention in order to show what he wants to show in the trick and hide what he wants to hide in it.

The young people were perfectly aware that these mechanisms were in operation. This was especially so since this was not the first experience of illusion for the teenagers. In the interviews, the young people surveyed said that they had seen such performances before. One of the interviewees recalled that he "saw this experiment with another illusionist", other people said that they had seen various tricks, e.g. on YouTube, on TV, in talent shows or in social media.

An important observation also concerned the impact of the form of communication on emotions. As already mentioned, the young people had previous contact with various types of magic tricks and shows, but in most cases it was contact via some medium - i.e. television, the Internet, etc.

Attending the event in person was an entirely different experience. It triggered a more diverse range of emotions. Sometimes the attendees were directly involved. Several of them were invited to take part by the illusionist. They were asked, for example, to touch the props or check something. It was a way of making the tricks believable, confirming that they were not based on deception. According to one of the attendees, the show that he attended was: "something completely different." He said: "I've never seen a show like this before."

One of the respondents described her experience from the show as follows: "It was my first time really seeing a show like this. You see it on television all the time. On talent shows and stuff like that. But to see it live, it's PURE MAGIC!" The attendee in this vivid way described her feelings, expressing in the quoted statement her enchantment, the captivating charm of this show, which she succumbed to.

An equally interesting observation concerns the body's stress response. As the conversation progressed, 10% of its participants mentioned the stress they experienced. The data is presented in Illustration 5.

Illustration 5: Percentage of respondents experiencing stress during the show



Source: Own elaboration

Based on the observations and answers provided, it can be concluded that for some of the young people, attending the show was a stressful situation. It was triggered by the new situation and uncertainty about what might happen on stage. Observations showed non-verbal signs of stress accompanying young people waiting to participate in the tricks as well as during the show itself, e.g. uncontrolled touching of the face, blushing, nervous smiles, involuntary movements involving the head, arms and legs.

The respondents themselves also indicated: "A bit stressful at first before I went into the room. I had no idea what to expect (...)", "I was trying to overcome the stress I was feeling before the show".

Another source of stress for the attendees was fear of what their reaction to magic would be. The stress was caused by the uncertainty of how they would behave in the face of the

illusion. The internal question that triggered the stress reaction was: *am I susceptible to illusion?* By default: *can I be manipulated?* These doubts resulted from lack of self knowledge and a kind of fear of what the person would discover about themselves. Also in this case, the challenge was treated as a task, and the person who took it made a deep reflection. A perfect illustration of this process is the statement: "I just took part in a kind of experiment. I learned a few things about myself. Now I've found out whether I'm susceptible to illusion, but I don't think I am. Throughout our lives, we learn new things about ourselves and I think it was interesting."

The quoted statements show that the illusion show became an opportunity for some attendees to question their understanding.

The *live* illusion show evoked a diverse range of emotions in its attendees. From curiosity, intrigue and fascination, through neutral attitudes to frustration and stress.

The show was attended by people who are aware, rational and familiar with this type of performance, which confirms that illusion has a huge potential to influence the emotions of the viewer.





The main emotion – curiosity

The mysterious nature of the magic show evokes strong emotions in a person who witnesses it. The main one is *curiosity*. This emotion was triggered in the show's attendees. It appeared in the company of related ones, such as: *interest* and *fascination*, which are also part of the cognition-oriented range of emotions. "Curiosity is the desire to know, the human desire to learn new things, explore, cross borders, discover the unknown and ask questions." Curiosity is described "as a hunger and thirst for knowledge, an attraction to the unknown, a desire to explore secrets"¹.

The presented definition of curiosity is fully in line with the respondents' answers. The tricks presented by the illusionist provoked reflection along the lines of: *how is it done/how does it work?* This is confirmed by such statements as: "I wonder how he did it," "I wonder what happened to those coins."

Even though all of the attendees knew that the tricks presented to them had nothing to do with the operation of supernatural forces or magic, none of them were able to describe how they were performed or rationally explain them. This situation aroused curiosity and questions. For some people, there was frustration caused by the inability to see what happened and how. The attendees clearly articulated their irritation with their inability to explain the method by which the trick was performed.

One of the attendees said that as the show went on, his curiosity grew.

The elements of the show that were most memorable to the attendees were:

- **it could not be rationally explained**, such as, e.g.: "The most memorable thing for me? While he was holding those coins and they stayed there without falling down"; "these moments. When at first they wouldn't let go"; "The spinning coins attracting each other, that's what I remember most"; "Cards, I just remember the sevens vividly. I mean, that moment that he had those sevens was cool";
- **were their direct experience, through their involvement in the show**: "The most memorable was when I had to choose one piece of paper and pull it out of the envelope. And it turned out that it was the same one." "When the man told me to take out a card, just one card (...)"

Some of the participants shared their thoughts, suspicions, or ideas on how to explain the trick, including:

- "I think the deck consisted of identical cards but I'm not sure because later I asked if I could take a look at the deck and he said no, so I had my suspicions."

¹ <https://zwierciadlo.pl/psychologia/522386,1,ciekawosc--co-to-za-emocja-czym-jest-ciekawosc-poznawcza.read> (accessed: 10.2022)

- "Oh, and with that coin trick. I don't know how exactly it worked, but I feel something may have been swapped or hidden in the sleeves."
- "Something may have been up with the deck. For example, not all of the cards were shown and those 7s were part of the deck."
- "The coin trick - I just can't explain it, but there's definitely a logical explanation for it."
- "I could have looked at the cards and yet I couldn't, the cards could have been different or maybe the same and I just didn't know."
- "I think there were all sevens in the illusionist's deck. And he could have switched the coins in his hands or something. I think the only thing that confirms my suspicions is when my friend asked if she could see the pack and he said no."
- "I think the deck was full of identical cards. No matter what you choose, you'll get the same card. And the coins? There was a magnet hidden under his clothes, in the sleeve."
- "I think there were only sevens in the deck. As for the coin thing, I think the guy had some sort of magnet attached to him."
- "The coins - I find it hard to explain. Maybe some kind of magnet was involved."
- "The cards - I'm guessing they were all identical. Because I don't think there could be any other way. I bet they were all the same."
- "I don't know how it happened that you could find the same card in the envelope."
- "I wonder what the trick with the coins is, what the magician did to connect them so that they stretched, and when I tried it, it didn't work."
- "The magnet in the coin trick might have been between the fingers of the right hand."
- "When the man told me to draw only one card, just one, and it was done in such a way that I would focus on one card and not the others, so as not to notice that it was one and the same pack."

The analysis of the attendees' statements shows that most of them were interested in finding solutions to the situation they were involved in.

However, this does not change the fact that the young people started looking for an answer to explain this mysterious phenomenon, fully aware that it must have some rational explanation. To the interviewer's question: *Would you like to find out how it worked?* The answer was affirmative.

However, cognitive motivations differed. The respondents answered that:

- in this way "they would like to satisfy their curiosity" - this was the most frequently given reason
- "discover how this illusion works and how to do it yourself"; "see how it works, how someone manages such a trick",
- "show this side of yourself as a person who creates an illusion to see how the viewer will react",
- develop yourself by satisfying your emerging curiosity: "because it's naturally interesting when you want to experience and develop."

When asked if they could perform such tricks, respondents answered "no" or "currently/not at the moment", but then added that it was only a matter of time. They believed that such an ability was within their reach, it just takes the will and time. First they'd need to understand the mechanism of action, then to learn how to do it technically. One of the surveyed persons also added that in addition to manual dexterity, "proficiency in confusing people's minds" is also needed.

The young people declared that if they wanted to, they would be able to learn it. On this occasion, they gave various sources from which they could learn how to do magic tricks, and they were as follows: another person – someone who can do it, e.g. an illusionist, YouTube - watching tutorials and performances, on their own – by trial and error.

When asked if they would like to have such skills, they confirmed that they would. They argued, among others that: "it would be nice to have the skills of an illusionist"; it is "definitely a cool skill to have"; "everyone would like to do them (tricks)".

The respondents' answers testify to their openness and willingness to learn something that interested them, fascinated them, intrigued them. They confirm that they are able to learn even difficult and currently incomprehensible things. They are guided by rationality. They understand that there is no secret knowledge and no supernatural factors that affect a person, thing or process. Everything we deal with is based on rational, scientific foundations. And if so, it can be discovered and learned. The young people are aware that in order to acquire specific knowledge and skills, even in the work of an illusionist, three factors are needed: willingness, time and sources. This attitude indicates a high level of self-awareness and intellectual development.

The sources of knowledge acquisition mentioned by the young people are part of the universal and timeless educational canon, i.e.:

- master, teacher, mentor – a person who transfers his knowledge and skills,
- teaching material – e.g. a book, textbook, artefact, network, i.e. any non-personal source used in the educational process,
- self-education – independent work consisting in gaining knowledge, developing one's talents or acquiring new skills, outside of any system.

A graphical representation of the universal sources of knowledge is shown in Illustration 4.

Illustration 8: Universal sources of knowledge



Source: Own elaboration

The presented summary shows that technologically highly developed youth from the 21st century intuitively provide the educational resources that allow them to learn about the world and the processes taking place in it, i.e. to satisfy human curiosity.

The *curiosity* evoked by the illusionist and the emotions related to it stimulated the young people to undertake educational activity, i.e. to ask questions, reflect, try to explain, search for sources of knowledge, as well as the desire to acquire such skills.

Attendance at the show was assessed positively by the overwhelming majority of respondents. Nobody gave a negative rating.

The illusion show that the young people attended was based on the so-called *wow* effect, i.e. triggering a response that exceeds expectations, triggers surprising emotions. The illusion aroused curiosity and interest, and developed imagination. The emotions evoked influenced their desire to search for sources of information and acquire knowledge, develop new skills.

Education based on the *wow* effect is also attractive to teenage youth who have declared their interest in this type of venture.



CONCLUSION

On the basis of the observations of the participants of the experiment and the interviews conducted, it can be concluded that:

- application of methods based on the so-called *wow* effect, in this case using illusion, magical elements strongly affect the sphere of emotions – it strengthens them so much that they are easily perceived by participants and noticeable by observers,
- the main emotion aroused in the participants by the illusion is *curiosity*,
- most of the attendees of the event evaluate attending the show positively, and emphasize the good mood created by the magic,
- attending an illusion show encourages them to look for solutions, reflection, discover the mechanisms of magic, motivates to act,
- the attendees of the show are aware that there are no magical forces in the world – supernatural, paranormal. The young people want to explain the event, assuming that all events and processes are rational and have explainable grounds.
- the participants make attempts to explain the phenomenon immediately after witnessing it, based on the resources they have, e.g. knowledge, creativity, their own experiences and insights from observation. They also declare a willingness to use other sources to learn the mechanisms of the illusion,
- those elements that cannot be rationally explained at first are remembered best; they are related to unsatisfied curiosity; they directly prompt action.

The research shows that attending a magic show triggered strong emotions, put the participants in a positive mood, encouraged observation, reflection and an independent search for solutions. It stimulated the desire to discover what is unknown, increased internal motivation to act.

It can be concluded that magic contributed to the arousal of curiosity understood as cognitive activity that is not accompanied by external coercion. Thus, it is an important motivator for self-development.

The curiosity caused by the illusion, the desire to search and discover, are strongly rewarding states. If we are able to awaken them in ourselves, sense often appears, while fear, sadness, and a worse mood disappear.

What will be learned in the company of positive emotions will be permanently recorded in memory, because an effective learning process requires the interaction of thoughts and emotions. The combination of education with strong emotions is effective because it activates more cognitive areas, motivates to undertake new activities and look for solutions.

Therefore, illusion can be successfully used in educational activities.

The results, observations and conclusions collected during the experiment confirm the truth of one of the main guidelines for modern teachers and educators, which is: “for

learning to be effective, not only the mind, but also the emotions, should be involved in it, and the most effective form of acquiring knowledge is experiencing”².



² <https://earlstage.pl/blog/2021/05/06/emocje-w-procesie-uczenia-sie-ja-emocje-wplywaja-na-nauke/>
(accessed: 10.2022)