

„INVISIBLE“ FACTORS OF SCHOOL CATERING

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Abstrakt: *The contribution is aimed at investigation of primary school pupils' attitudes toward school catering. The actual researches aimed at the mentioned topic usually use quantitative methods, mainly questionnaires. The researcher usually constructs the questionnaire out of the factors which probably (based on hypothetical level) influence attitudes towards school catering. The proposed questions evoke specific reactions of respondents and the research results offer no more reasons of the attitudes except the already known ones. That is why we decided to use qualitative method of gathering research data. The data have been evaluated by grounded theory. By using qualitative methods we have obtained very particular information about investigated phenomenon. On the bases of obtained results we are trying to explain a model of school catering operation for the observed group of pupils.*

Key words: *students, school food and preparation, qualitative research, focus groups, grounded theory*

Introduction

Children spend more and more time at school and parents are normally at work during the day, therefore, a family lunch together is impossible. As a result, it is very important for children to eat at the school canteen where a quality meal is provided. The present situation in school nutrition is unfavorable. The school canteen is used by only half of all children. From this half, the majority throw away the half-eaten school meal despite the fact that school is in accordance with healthy nutrition.

We could identify the school meal as the best alternative in the healthy nutrition of our children. Our school children do not prefer this kind of food. Nutritionists and dietitians see the problem as being that the children are not familiar with the type of meals prepared at the school canteen. There has been a lot of research done that looked for reasons which supported students eating in the school canteen. Studies relating to this problem use quantitative methods. In the years 2000–2004 at Karlova University in Prague a small research was conducted which targeted certain views about the young people's orientation in the sphere of healthy nutrition, about their present eating habits and attitudes towards food. The method used in the research was the questionnaire (Marádová, 2004).

In the years 1997–2001 a broad survey on the topic “Primary and Secondary grammar School Students’ Attitudes and Opinions on chosen lifestyle-related questions” was conducted within the whole country of Slovakia. As a research tool widely formulated questionnaires were taken (Ušáková, 2002).

Another research dedicated to the evaluation of secondary school students’ attitudes toward an alternative source of nutrition also used as a research tool a questionnaire. Questionnaires were designed for secondary school youngsters. Students in the questionnaire were marked their agreement or disagreement with the given statements (Peterková, V. – Paveleková, I. – Vámošová, T., 2009).

A study entitled “Evaluation of eating habits of a chosen sample of primary and secondary school students in Slovakia” gathered the required source data by using a questionnaire. The questionnaire was made within the project “Healthy Nutrition” administered by the Slovak National Institute for Education in Bratislava in the years 2006 – 2007 (Peterková, V. – Paveleková, I., 2008).

“Eating habits of primary students” is another research project conducted in Brno that for collecting data used a questionnaire too. There were open and closed questions used in this questionnaire (Veselá, J. – Stanková, H., 2008).

Thousands of researchers all over the world used a questionnaire as a research tool for collecting data. We were inspired by foreign countries, mainly by studies inquiring about attitudes and opinions on food and catering by using other research methods.

In Slovenia research was conducted on the topic “Attitudes toward foodstuffs in Slovenian grocery stores”. The research method used was the *method of focus groups* (Videcnik, 2001). In Eastern Baltimore a small research project was conducted using the method of focus groups to find out the dominant meals preferred by Afro-American adolescents (Dodson, Jennifer M.D. et al. 2005). The method of focus groups was used by researchers to find out the factors that impact drinking milk by children (Connors, Bednar, Klammer, 2001). Finding out the children’s eating habits there were used group interviews of women from particular ethnic groups from the U.S.A. These children were not older than one year (McGarvey EL, et al. 2007).

Methods

As a main research tool we chose the method of focus groups (FG). We wanted to get a multifarious, diversified and vivid portrayal of the participants’ discourse. This choice resulted from our need to meet the participants in direct verbal communication and participate in the interactions that we expected to arise from the discussion about school food and catering. We wanted to do it on the basis of the analysis of the group’s interactions that is considered as a basic trait of the method of focus groups.

In the literature we can find a lot of definitions of focus groups. They are characterized as organized discussions (Kitzinger 1994), collective activities (Powell et al 1996), social events (Goss & Leinbach 1996) and interactions (Kitzinger 1995). Morgan prefers a more inclusive approach. He defines the focus group as a research technique that gathers data through the medium of group interaction. “The group interaction arises from the discussion and the topic of the discussion,” states the researcher. Essentially it is a “focus” of discussion. It is set by the researcher’s interest. The researcher’s interest

creates the “focus” and the data start to be gathered themselves in the group interaction (Morgan, 1997).

According to Anita Gibbs (1997) research by focus groups requires an organized discussion with chosen groups of individuals, getting information about their opinions, and experiences with the given issue.

The group interview is a simple, fast and comfortable way of getting data from various people simultaneously. Focus groups explicitly use group interactions as a part of the method. The researcher asks serially about the questions’ responses. He encourages a mutual narration. Participants exchange their anecdotal opinions. The method of focus groups is useful mainly in case we want to get a view inside human knowledge, life experiences and thinking and reasoning (Kitzinger, 1995).

The analysis of gathered data was conducted by the method of qualitative methodology. While the quantitative research has a verifying character (is testing the already existing theory), qualitative research is above all constructive; that means a new theory arises from it (Gavora, 2001). The most important and fundamental difference is that in qualitative research we formulate a hypothesis. In quantitative research we test the hypothesis. Quantitative research uses deductive logic, which means the problem is theoretically described in the beginning. This problem is “translated into hypotheses” and the hypotheses are consequently tested. It is already given what will be observed and tracked. On the other hand the logic of qualitative research is inductive. In the beginning of the research process there is a widely formulated question and broad data collecting. The researcher is looking for similarities in the data, formulates preliminary conclusions and is searching for their support in other data. The result is a newly formulated hypothesis.

Both in qualitative and quantitative research similar techniques of data collecting can be used (interview, observation) but the way they are used is different. While the quantitative research reduces the acquired data, qualitative research tries to catch them in maximal range and work them up by specific analytical processes. The core of these analytical processes is always coding – operations by which the data are deconstructed, conceptualized and put together in another way. Coding is based on taking the sequences apart into units. To the units are then attached names. The researcher then works with such named fragments.

At the same time we decided not to stay on the level of describing the phenomena but we tried to formulate a complex theory. We also tried to identify the variables and relationships between them; and to outline the model of phenomena. Creating theoretically grounded interpretations is one of the most modern ways of understanding reality.

Results and their discussion

The time-consuming phases of hard work helped us to understand the problem and to outline the theory, for the given group of students, which explains why students accept or not accept food in the school canteen.

COLLECTING DATA (YOUNGER STUDENTS)

There were 10 students that were participating the group discussion. There were four boys and six girls. 351 individual statements appeared during the group discussion.

From boys we got 210 and from girls we got 141 individual sentences. Individual statements were within the range of 7 to 107 per student. There were two dominant speakers in the focus group. As a *dominant speaker* we considered a person whose personal utterance was manifested more than 50 times. As a silent participant we considered those whose utterances appeared less than 15 times. There were only three silent participants, the rest were relatively communicative. We could observe that the examined focus group consisted of mixed participants. We find important to mention that some of the silent participants brought new topics into the group discussion. For example, the participant with the smallest number of utterances brought into the discussion a topic related to additives. This topic was then developed by the participants.

Group discussion lasted 90 minutes. It was recorded on electronic medium (mp3 recorder). After that followed the literal transcription and began the analysis itself. In the literal transcription we got 19 pages that consisted of 907 lines and 9897 words. Interviewer articulated from all spoken word only 638 words.

Data gained from the group of younger students analyzed by the techniques of Grounded Theory

In the process of coding there arose relationships between main categories, which consequently created following categories

FEAR OF SCHOOL FOOD AND PREPARATION

CULTURE OF CATERING

SOCIAL RELATIONSHIPS

Later we introduced subcategories into the relationship with the main category according to the integrative diagram. The process of creating paradigm model is connected with thinking over and identifying causes, consequences, conditions and interactions that connect particular categories.

In the process of selective coding we placed individual categories under categories of a higher level because we wanted to get an integral generalized view on the issue as a basis for formulating our final theory and conclusions.

The task of the phase of reduced empirical data processing is to organize them into the following pattern: causal conditions, phenomena, context, intervening conditions, strategies of performance and interactions; and conclusions.

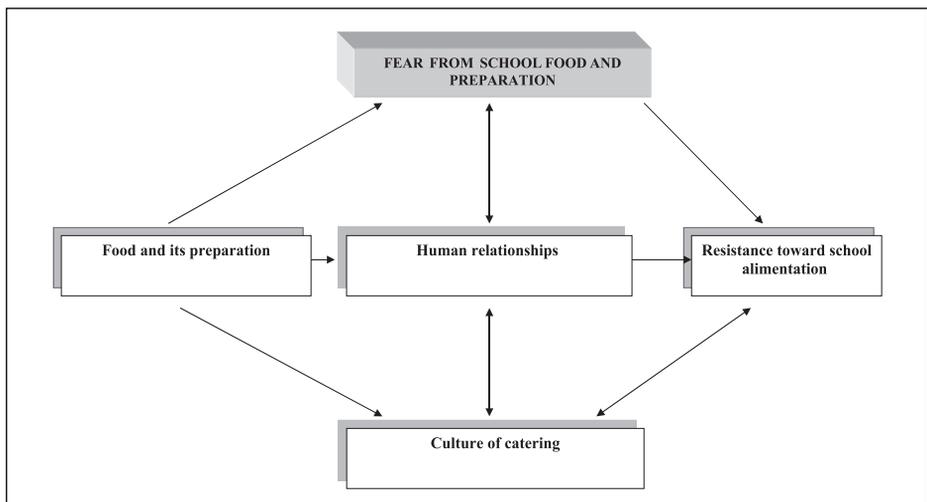
The causal condition that leads to the fear of school food and preparation presented “Alimentation’s Organization and its Management” that have in charge all run in the school canteen. *The Intervening condition* that creates the fear in students are human relationships. *Context* is represented by catering culture. Simple and relatively explicit was the identification of conditions and conclusions, e.g. a cook is yelling at students when they forgot their meal ticket and it results in resistance and disgust in visiting the school canteen. Below (table 1) there is an integrative diagram enriched by examples of grounded data for the corresponding categories.

As a dominant category, extracted from the data acquired from younger students, is fear of school food and preparation that is why it stands as a central category of the causal model (scheme 1) that represents the relationships between fundamental categories.

Table 1 Paradigm model explaining the way of function of the main phenomena - Fear from school alimentation and catering (younger students)

	Causal conditions	Context	Intervening conditions	Strategies of performance and interaction	Consequences
Categories	Food and its preparation	Catering Culture	Human relationships	Resistance	Resistance - disgust
Groundation in data Examples	<p>„there are two lines /shows/, one line don't move and the older jump the line“</p> <p>„they shouldn't control what we eat“</p>	<p>„if somebody served for us, there wouldn't be lines“</p> <p>„anytime I get dirty plate or whatever“</p> <p>„they should dish wash better“</p>	<p>„and you, what are you doing there and swear follows“</p> <p>„she starts to ask me why I didn't eat it up, and then she tells me, go and sit over there and eat it“</p> <p>„she enforced me /verbally/, by force, to eat it“</p>	<p>„I hurry, I have a after school activity“</p> <p>„she had to eat it up, by force, she was watching her“</p> <p>„I carry it away when she is not watching“</p>	<p>„it bothers me, I don't eat the meal up“</p> <p>„she threw it out at home“</p> <p>„I don't eat it even though she force me“</p> <p>„I don't let her to command me“</p>

Scheme 1: Causal model – Fear from school food and preparation



Model of how the school system of alimentation and catering „works“ at younger students

At this place we would like to describe student and his/her behavior in school canteen as it is outlined in acquired empirical data. We also consider as important to mention the word “fear”. Fear as an anxiety of awaiting something unpleasant that an individual feels under certain circumstances. Fear is a protective part of his or her psychic. Fear is a feeling of concern caused by the presence or imminence of danger. It is a negative emotion, unpleasant experience with neurovegetative manifestation. Fear motivates us to escape and run from the danger. The run from fear = run from school canteen. It seems that the main problem of school nutrition is the fear of school food, its serving and its preparation. *Fear* appears at the students during their stay in school canteen. It chases them at his/her every turn. Entering the school canteen students experience the fear of theft. This relates to school that do not have guarded dressing room. Students are afraid of losing their personal things (school bag, jackets etc.). Student hurries because s/he is afraid of losing his/her personal things and consequently it results in quick and not proper eating. This induces the digestive system overload; otherwise students carry away the half-eaten meal. If student gets sick he finds the cause in the meal from school canteen. S/he considers the meal as bad and blames the cook who prepared the meal. The cause is not in the meal because every student would get sick, but the true reason is fear.

At the canteen’s entrance students can see a long line that forms at the meal counter. Students fear of not catching the bus home or after school activity.

Students also fear of older students that bully them. Manifestations of bullying in the school canteen are mainly: jumping the line and swearing. When the student finally gets to the meal counter s/he is waiting in anxiety what is going to happen.

From the participants’ utterances we can say that the relationships between cooks and students are not good. Bad social relationships have an impact on the development and state of human psychic. Yelling and shouting evokes stress in students and then it manifests with stomach contract. As a result of stomach problems students do not eat the meal up and throw it away.

When the canteen is full student doesn’t have a place to sit. Student experience the fear again. There is a high probability that the student carrying a tray in his/her hand pours the meal out and the probability is even higher if somebody hits him/her.

In the case that student doesn’t like the food and is about to throw it away or is hurrying because s/he was delayed in the line. Fear appears again. This time the fear is caused by the presence of a teacher - supervisor who often send the student eat the meal up. Student is enforced and have to eat the meal up either s/he likes it or not. The teacher-supervisor means it well and is not aware of serious effects that can be later developed not only in the sphere of eating habits but also as various eating disorders in adolescents and adults.

Conclusion

In the article we dedicated mainly to primary students’ attitudes toward school alimentation and catering. The research sample was made of 6th graders. For collecting

the data we chose the method of focus groups. For data analysis we used the method of Grounded Theory that helped us to explain the examined problem. The research in its development and results was oriented on the quality improvement of school alimentation and catering. In the article we also described the main problems of school catering. We explained the essential reasons why students don't want to eat in school canteen.

Fear is the biggest problem in school catering for the 6th graders at primary school. Fear appears as a result of negative human relationships.

On the basis of acquired results we suggest to change the system of school alimentation and catering. The change mainly relates to the organization and management of school catering. At the first place we consider as very important cooks' training in pedagogical, psychological spheres. Their verbal speech (discourse) should be pleasant and should induce in students' appetite. Non-verbal manifestation of the canteen staff shouldn't discourage students from eating the meal. Canteen's furniture and equipment should be renewed regularly to make students feel pleasantly in the school canteen. We know that it is not possible in term of money but some grants to modernize the school canteen would help. On healthy nutrition offered at school canteens depends health of our children, so why not to use it?

Literature

- GAVORA, P. *Úvod do pedagogického výskumu*. Bratislava: UK 1999. ISBN 80-223-1342-4
- GIBBS, ANITA 1997. Social Research Update is published by: Department of Sociology
- GOSS, J. D.; LEINBACH, T. R. 'Focus groups as alternative research practice', *Area* 28, 1996. (2): 115-23.
- KITZINGER, J. 'The methodology of focus groups: the importance of interaction between research participants', *Sociology of Health* 16, 1994. (1): 103-21.
- KITZINGER, J. 'Introducing focus groups', *British Medical Journal* 311: 299-302. (29 júla 1995) [On-line]. Available <http://bmj.bmjournals.com/cgi/content/full/311/7000/299>
- POWELL, R. A. and SINGLE, H. M. 'Focus groups', *International Journal of Quality in Health Care* 8, 1996, (5): 499-504.
- MARÁDOVÁ, E. Vývoj nutričného chování dětí a společné stravování. In: *Výživa a potraviny pre tretie tisícročie. Spoločné stravovanie: Zborník z konferencie z medzinárodnou účasťou*, október 2004. Nitra: SPU 2004, s. 23-26. ISBN 80-8069-421-4
- MORGAN, D. L. *Ohniskové skupiny jako metoda kvalitativneho výzkumu*, SAGE 1997, ISBN 80-85834-77-4
- PETERKOVÁ, V.; PAVELEKOVÁ, I.; VÁMOŠOVÁ, T. Hodnotenie postojov študentov stredných škôl k alternatívnym výživovým smerom In: *Acta Facultatis Paedagogicae Universitatis Tyrnaviensis: séria B - prírodné vedy: [zborník Pedagogickej fakulty Trnavskej univerzity]* Trnava: Pedagogická fakulta Trnavskej univerzity, 2009. ISBN 978-80-8082-282-8. - S. 3-113.

- PETERKOVÁ, V.; PAVELEKOVÁ, I. *Evaluating the Eating Habits from the Chosen Sample of Primary and Secondary School Students in Slovakia*. In: *School and Health* 21, 3/2008: social and health aspect of health education. 1.vyd. Brno: MSD, s. r. o., 2008, ISBN 978-80-7392-043-2. s. 159-167
- UŠÁKOVÁ, K.; KITAŠOVÁ, K. 2002. *Postoje a názory žiakov základných škôl k otázkam životného štýlu*. In: *Pedagogické spektrum*, roč. 9, 2002, č.7/8, s.51-57, ISSN 1335-5589
- VESELÁ, J; STANKOVÁ, H., 2008. Eating habits of primary school pupils. In: *School and Health* 21, 3/2008: social and health aspect of health education. 1.vyd. Brno: MSD, s. r. o., 2008, ISBN 978-80-7392-043-2. s. 159-167

„NEVIDITEĽNÉ“ FAKTORY ŠKOLSKÉHO STRAVOVANIA

Abstrakt: Cieľom príspevku je zistiť postoje mladších žiakov základnej školy k školskému stravovaniu. Výskumy, ktoré sa venovali tomuto aktuálnemu problému využívali kvantitatívne metódy, predovšetkým dotazník. Výskumník do dotazníka začlenil faktory, ktoré pravdepodobne ovplyvňujú postoj ku školskej jedálni. Navrhnuté otázky u respondenta vyvolajú odpoveď, čím sa nepodarí zistiť iné dôvody ako sú už dlhodobo známe. Rozhodli sme sa preto využiť kvalitatívnu metódu, ktorá slúžila na zber dát. Zozbierané dáta vyhodnocujeme metódou zakotvenej teórie. Pomocou kvalitatívnej metódy sme získali o jave detailné informácie, ktoré by sa kvantitatívnymi metódami obtiažne podchycovali. Na základe nami získaných výsledkov sa pokúšame o výklad modelu „fungovania“ školského stravovania pre každú vekom profilovanú skupinu.

Kľúčové slová: žiaci, školské stravovanie, vplyv, fókusové skupiny, zakotvená teória