THE CRITICALLY THINKING EMPLOYEE: EMPLOYERS’ POINT OF VIEW*

Valdonė Indrasienė¹, Violeta Jegelevičienė², Odeta Merfeldaitė³, Daiva Penkauskiene⁴, Jolanta Pivoriene⁵, Asta Railiene⁶, Justinas Sadauskas⁷, Natalija Valavičienė⁸

¹,²,³,⁴,⁵,⁶,⁷,⁸ Institute of Education Science and Social Work, Mykolas Romeris University, Ateities st. 20, LT-08303 Vilnius, Lithuania

E-mails:¹ v.indrasiene@mruni.eu;² violeta.suboc@mruni.eu;³ o.merfeldaitė@mruni.eu;⁴ daiva.penkauskiene@mruni.eu;⁵ jolantapiv@mruni.eu;⁶ asta.railiene@mruni.eu;⁷ justas_sad@mruni.eu;⁸ natalija.valaviciene@gmail.com

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Abstract. Critical thinking is one of the most significant skills and abilities, which have direct impact on individual success and society’s welfare. Especially loud is the voice of employers drawing attention to the need for critical thinking skills in the labour market and in a rapidly changing world in general. The World Economic Forum (2018) indicated the ten most wanted and needed skills in the labour market of 2020: critical thinking was placed at number two, following problem solving at number one. The American Management Association (AMA) Critical Skills Survey (2010, 2012) revealed that, according to employers, employees need to think critically, solve problems, innovate, collaborate, and communicate more effectively – they must excel at the “four Cs”: critical thinking, communication, collaboration, and creativity. The goal of this article is to find out what and how employers with different managerial experience see critically thinking employees in today’s labour market. The research is based on phenomenography methodology and is the first such type of research about critical thinking in Lithuania. The phenomenography study revealed three hierarchically interconnected categories: A-decision to act here and now; B- verified and assured decision to act. C- innovative decisions for operational improvement. Empirical data allows identifying critical thinking related expectations of employers who anticipate that their employees could deal with emerging situations and are able to reason chosen decisions. Employers state that the critically thinking employee could give innovative suggestions; research participants describe critical thinking as higher order reasoning which gives added value to an organisation. Such understanding

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reflected, the definition of critical thinking as a cognitive endeavour, directed to functionality in making decisions and solving particular problems. Employees’ critical thinking manifests at personal, interpersonal and societal levels.

**Keywords:** critical thinking; critically thinking employee; employer


**JEL Classifications:** J24

**Additional disciplines** sociology

1. Introduction

Critical thinking is one of the most significant of skills and abilities which have direct impact on individual success and society’s welfare. The importance of critical thinking can be judged by the growing interest in scientific and public life areas. Especially, the lack of voice of employers inviting to pay attention to the need of critical thinking skills in the labour market and in a rapidly changing world in general. The World Economic Forum (2018) indicated the ten most wanted and needed skills in labour market in 2020, where critical thinking was placed at number two following problem solving placed at number one. The American Management Association (AMA) Critical Skills Survey (2010, 2012) revealed that, according to employers, employees need to think critically, solve problems, innovate, collaborate, and communicate more effectively – they must excel at the “four Cs”: critical thinking, communication, collaboration, and creativity.

Critical thinking is a desirable competency which employers expect from their prospective employees (Hassan, Madhum 2007). It is integral not only to carrying out direct functions well but also to enable employees to raise valid, critical questions leading towards right and better solutions, being able to reflect on their own and other people’s activities as well as making respective adjustments, understanding the importance of their personal contribution to the development of the organisation and society in general (Penkauskiene et al. 2019). When organisations ignore the importance of including critical thinkers as a part of the organisation new ideas may not emerge, current processes may not be challenged, and changes may not occur. This results in organisations becoming stagnant, having outcomes that stay the same (Bednarz 2013). Natale, Ricci (2006) emphasise that critical thinking within teams improves organisational performance. It also enhances training and development initiatives. Employers associate critical thinking with the skill to make critical decisions. This skill is considered to be of great importance in complex situations. Penkauskiene et al. (2019) state that critical thinking by employers is recognised mostly as the capacity to avoid mistakes and make the right decisions; to correct and regulate oneself; and to be socially responsible.

However, much research does not take into account the employers’ perspective or workplace characteristics (Grosemans et al. 2017), and empirical studies aiming to characterise how critical thinking is needed, understood and applied in the workplace remain scarce (Moore 2013). Among those few studies that do include the employers’ perspective, the AMA Surveys (2010, 2012) could be mentioned. The AMA Critical Skills Survey (2012) questioned 768 managers and other executives, who said that critical thinking, communication, collaboration, and creativity skills and competencies have been articulated within their organisations as priorities for employee development, talent management, and succession planning. The majority agreed that their employees are measured in these skills during annual performance appraisals, and job applicants are assessed in these areas during the recruitment process. Three out of four (74.6%) managers and executives who responded to the AMA survey said that they believe these skills and competencies will become more important for their...
organisations in the next three to five years. However, according to the survey more than half of respondents say there is significant room for improvement in these competencies among their employees. Most respondents accept that their employees are average, at best, in the four Cs areas.

Research shows that there is a big gap between declarations in policy documents and the situation in the labour market. Scientists (Pithers, Soden 2000; Burbach et al. 2004; Andrews, Higson 2008) emphasise the need to look more seriously at relevance of critical thinking and its factual manifestations in real labour market situations. Research (Lai 2011; Ennis 2018; Arum, Roksa 2011) also indicates low correspondence of critical thinking education with critical thinking practical application. Since the ’80s employers have complained about the quality of higher education graduates due to an important skills mismatch: rapid technological change and global competition require a more skilled and flexible workforce and the people entering the labour market do not have sufficient skills to meet the challenges of a high-performance workplace. The knowledge, skills and abilities that employers were looking for refer to: interpersonal skills, communication (both oral and written), critical thinking, motivation and personal attitudes, ability to work with data and information, and ability to apply mathematics (Van Horn 1995). Presenting the research, Lazányi (2012) says that more than 50 per cent of new employees do not meet the standards for basic skills – such as communication, interpersonal relations, critical thinking and problem solving. The AMA 2012 Critical Skills Survey (2012) shows that managers and executives believe it is easier to develop these skills in students and recent graduates (59.1%) than in experienced workers (27.1%), suggesting that students and recent graduates may be more open to new ideas, versus experienced workers with established work patterns and habits. Mentoring and in-house job training were identified as the most effective methods to improve employees’ skill levels in these areas, followed by one-to-one coaching, job rotation, and professional development.

The lack of research, the contradictions between declarations and labour market reality and inadequacy between training of critical thinking skills and organisations’ needs presupposes the relevance of this article which aims to fill the evidence-based knowledge gap. The goal is to find out what and how employers with different managerial experience see as critically thinking employees in today’s labour market. The research is based on phenomenography methodology and is the first such type of research about critical thinking in Lithuania.

2. Methodology

Research type. In order to reveal how employers experience critical thinking, phenomenography methodology was applied. This approach was chosen as best matching the research object and research question – how employees’ critical thinking is experienced by employers. Phenomenography allows investigating the experience and understanding of particular phenomenon (Marton 1981). It aims to reveal different ways of understanding (perception), variety of conception and to find out their interrelations. This research seeks to find out different expression of employees critical thinking in the labour market.

Research participants. 28 employers (managers) have participated in the research. Phenomenography does not require a large number of research participants; in order to find out diversity of experience and to manage research data it is recommended to include about 20 participants (Larson, Holmstrom 2007; Trigwell 2000). These selection criteria were used: not less than one year’s managerial experience; heterogeneity of economic activity; and heterogeneity of organisational type.
Characteristics of research participants. Main characteristics of research participants are presented in Table 1.

Table 1. The main characteristics of the participants

<table>
<thead>
<tr>
<th>ID of research participant</th>
<th>Gender</th>
<th>Economic activity</th>
<th>Managerial experience</th>
<th>Age</th>
<th>Type of organisation</th>
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</table>

According to the type of organisation there were managers from 15 public institutions, 11 business and 2 nongovernmental organisations. According to the type of economic activity there were managers from 6 social services, 5 educational, 3 information technology, 2 public health, 2 pharmacy, 2 reconstruction, 2 ecology, 2 commerce, 1 real estate, 1 transport and logistics, 1 accountant, 1 insurance enterprises. Managerial experience ranged from 5 to 30 years. 11 women and 17 men participated in the research; they were from 32 to 60 years old.

Data collection. The open-ended question was asked: how do you understand that your employees think critically? Interviewers encouraged research participants to share their personal experience about critical thinking, therefore the main interview question was accompanied with other leading questions which arose naturally during the interviews: what expectation do you have in relation to employees’ critical thinking? What is the most remarkable example of critical thinking? Why that one? Interviews were recorded and transcribed. The duration of interviews ranged between 30 to 45 minutes.
**Data analysis.** Data analysis started immediately after all data collection and transcription. This approach was chosen for several reasons. First, researchers wanted to be able to get acquainted with all ideas and compare different perceptions and this was only possible having all data at hand. Second, the team was composed of six researchers who shared the workload. They worked in two groups, each consisting of three researchers. Each group had a chief researcher who was more knowledgeable in a phenomenography research approach and/or had practical experience. Each group member had to read the whole transcribed text several times to gain an overall impression; then to read the text again and mark answers to the interview questions. Following those two steps, groups of three gathered to discuss findings and to verify and validate the initial analysis. Those discussions were valuable in terms of the possibility to get a true, in-depth understanding of the phenomenon under investigation – to argue, to reason, and to return to the transcribed text (in some cases into audio material) to check meaning. All members of the groups had to come to a common agreement about an answer to the question. In cases of disagreement, researchers asked the opinion of experts (for example, Prof. K. Dahlberg). Afterwards researchers continued to work: noted similarities and differences in the statements; and determined descriptive categories of conceptions. Then again groups of three researchers gathered to discuss findings that were checked, approved or corrected within the group. One member of the group was in charge of preparing the final, joint version of categories with illustration of their meaning. The final stage of analysis included: detection and description of non-dominant ways of understanding; finding a structure in the outcome space; and assigning a name to each category of description. The steps of the data analysis were in line with the common way used in phenomenography studies (Larson, Holmström 2007). Two groups of researchers had regular meetings to discuss the results of the analysis process and to consult with each other. All final decisions – on descriptive categories and on a structure of outcome space were made collegially. In such a way, the validity of the research was ensured as Lepp, Ringsber (2011, p.118) state “In phenomenography studies it is common for the researcher to have a co-examiner who is assigned to test the validity of categories”. In this research case there was not only one co-examiner in each group, but all group members played a “trustworkers” role.

3. Results

During qualitative data analysis three categories were composed: A – a decision to act here and now; B – a verified and assured decision to act; C – innovative decisions for operational improvement.

**Category A – Critical thinking manifests as a decision to act here and now.** This category reveals that research participants relate critical thinking with problem solving in everyday situations. It is important for employers to know that in unexpected situation employees could make an immediate decision. The skill to make decisions is important not only in a crisis situation but also in everyday activity when any deviation from everyday activity happens. Research participants suppose that critically thinking people develop their own ideas based on their experience and facts; employees’ courage is a strong weapon in an organisation. Employers assess expression of critical thinking from specific situations, in which employees show courage and determination to make decisions:

<...> ability to make decisions quickly; they could be essential every day, every week, because there are urgent situations, problems, everyone goes to the manager if the situation becomes irregular. Therefore, based on many years’ experience I could say that this is the biggest challenge, and this is a skill – to make decisions quickly. Determination, it is not important if this decision is right or wrong. You switch on critical thinking, all experience, knowledge and make a decision <...>. You say: it could be otherwise, but I am making this decision, it is my decision, it is not important any more whether is it right or wrong, because I have taken it after assessing all possibilities.[A19]

Category A also encompasses employees’ skill to make decisions independently. Employers define independence as the skill to decide what actions are needed and to suggest the alternatives for problem solving. Research
participants say that good employees should seek the best results and be able to make final decisions, therefore they should be independent:

There was no request for consultation or for support. The main measure in our life is time. And you understand that the manager was not bothered regarding the issues which are not his business. The employee made the decision. The result is without your manager’s interference. There could not be a better identification of critical thinking. [A2]

Based on the data it could be assumed that the contemporary labour market needs employees who are independent and able to take responsibility for decision making. Responsibility is understood as maturity of personality and self-control. Critically thinking employees know the boundaries of their responsibility and what results are expected from them:

In our work we don’t use such terminology as “critical thinking”, we say “lack of responsibility”, not willingness to take responsibility, because this is the easier way <...> every time the situation is a little bit unique, but it happens repeatedly, and people don’t take responsibility, they delegate it to the head of department, they get rid of it. [A 9]

Critical thinking in this category is described not only as independent and responsible action, but also as a skill to make decisions based on arguments. Employers value these decisions which are justified, based on professional experience or an independently made problem analysis. Critically thinking employees develop their own problem solving decisions and justify them with strong arguments and convincing motives. Critical thinking manifests when employees understand that there is more than one decision and try to prove why their decisions are the best for an organisation. Critical thinking manifests when employees are able to reason why they took such a decision and demonstrate that their decision is based on analysis:

<..> all decisions should be based on arguments; it is important in an enterprise’s activity, also, as I have mentioned, the client, for whom we are making a decision, doing a proposal, they anyway ask such questions “and what if...”. We have to have ready answers before the client asks, so an employee should do this homework. [A27]

Category B – Critical thinking manifests as a verified and assured decision to act. This category encompasses disposition to doubt and aspiration to verify information: the skill to analyse a situation and one’s own activity.

This category reveals that research participants relate critical thinking with permanent searching for truth, doubts and questions “why; how it could be done differently”? Research participants explain that doubt is a part of critical thinking. Verification of doubts and comprehensive analysis of the problem helps one to reach the best solution for an organisation in a crisis situation, selling products or providing services. The main emphasis in this category is put on appropriate scepticism. Critically thinking employees should be curious and seek to explore the problem by formulating various hypothesis and searching for evidence-based arguments:

I always pay most attention to people who come and ask – why? For example, why do you mix these blocks but not those? Why does he need to do that? Why I am doing this? And then I understand, he is my kind of person, now we could talk. That is important for us <...>. There is a sixth sense. But there are people at work who are working and they don’t question why they should do that. [A23]

Critical thinking reveals itself also as a permanent analysis of one’s own activities. Self-analysis is a prerequisite for the professional development of every person. The experience of every employee is useful and applicable if it
is analysed. Research data show that employers stimulate analysis of activities as an expression of critical thinking by initiating self-assessment questionnaires, discussions of self-assessment, and interviews:

Everyone is different: one can act very impulsively, and think afterwards; another doesn’t say anything but you see from his behaviour, his writing, that he has paid attention. But there are cases – I do everything perfectly, you are looking for faults. <...> assessment, which is not only in writing, we share various forms with each other, but there are also personal conversations, we talk with them, what training do they need, in which direction does he want to develop.[A17]

Critical thinking in category B is also expressed as the skill to act by purposefully applying theory to practice. Research participants say that critical thinking appears with the understanding of tasks, not only the skill to explain the task in theory but also to do it in practice. Critical thinking reveals itself as employees’ understanding how to perform a theoretically grounded specific task. Employers emphasise that newcomers very often lack the skill to apply theory to practice:

In talking about practical application, because in business there is always a practical part, you need to understand very clearly what you are doing, how are you doing it, how to do it with minimum resources or how to get the best quality, so this is very obvious when a student arrives. He only talks, talks, very creatively, freely, but when you ask about applicability, there is a big gap. [A15]

Research participants assume that to know theoretically how to act is not critical thinking. Critical thinking starts to manifest when employees apply theoretical knowledge to practice. Employers encourage application of theoretical knowledge to practice by joint activities, stimulation to discuss with colleagues, trying various approaches to solutions.

Category C – Critical thinking manifests as innovative decisions for operational improvement. This category reveals that research participants relate critical thinking with employees’ initiatives in suggesting solutions which enable an organisation to develop added value. Original solutions are very important for the success of an organisation in the contemporary labour market, therefore research participants recognise critical thinking when employees suggest original, innovative decisions:

One person came and said what is wrong not only in structure, but also analysed from various perspectives and what could be better in a new system, the dangers if it goes uncorrected, what risks should be accepted, how much should be invested for particular purposes, how much it would save for a company. I was surprised, because I was not expecting that. I thought that a person in two three minutes will tell what is right, what is wrong, what to keep in mind. But when you see the structure, the prepared tables, you are surprised. He exceeded expectations, that this was a surprise. [A10]

Employers say that employees who give original/innovative suggestions tend to take a risk, but this is assessed as a prerequisite for an organisation’s success. Therefore, research participants emphasise that critically thinking people have greater ambitions and greater aspirations in their professional career. They also say that such employees tend to try suggested innovations themselves.

Critical thinking in category C also manifests as skill to make suggestions for changing commonly accepted decisions. Organisations which want to be successful need to progress by applying science and technological innovations; therefore, employers value employees’ different points of view and associate them with critical thinking:
There are processes, we have a quality management system, and everything is going well when suddenly there appears a person who says: “look, this is nonsense, it is a pointless step, we can do differently.” What is it? It is real critical thinking. He took decisions which had been operating for years and years and changed them. He gave arguments which we accepted, we said, why not? [A9]

Data analysis shows that three categories: a decision to act here and now; a verified and assured decision to act; and innovative decisions for operational improvement, are expressed at different levels presenting how critical thinking manifests (Picture 1).

![Picture 1. Defined categories
Source: developed by authors](image)

The decision to act here and now as the expression of critical thinking is oriented to the personal level and describes a particular specific employee. Employers associate critical thinking with quick decision making by every employee. Research participants emphasise that there are many situations when an employee needs to react immediately and to make decision personally:

*Because I represent a large pharmaceutical company, as I say, I don’t need soldiers, I need paratroopers – they are sent to some specific area and they can do all kinds of things from idea to final implementation.* [A4]

Thus, the employee assumes responsibility for deciding how to act in a way which is related to making decisions that are important to the organisation at the individual level.

A verified and assured decision to act as the expression of critical thinking is oriented to employees’ activities in interaction with other members of the organisation. Decision making in this category is a collective process, when reasoned decisions are made in regard to the majority of a group’s activities, opinions or positions. Employers emphasise that teamwork, by discussing and listening to others’ arguments, enables good results to be reached:
And then something happens, we stick together as different elements, as various professionals from different fields working together – you alone cannot come up with a decision – everyone has to think and to suggest the best possibilities from their profession. You put it together and have a decision."[A13]

This category is connected with the interpersonal level and action in the best interests of an organisation.

Innovative decisions for operational improvement as the expression of critical thinking are oriented to employees’ action with all members of an organisation. Employers emphasise that in seeking recognition and willingness to do better than others, progressive solutions are being developed and the added value of an organisation increases:

An employee says to me, but, manager, we can make better forms. Maybe we can look differently, flexibly. No, I can’t work with these forms, it is a waste of time. After that follow arguments, that we have to suggest, to improve, make better, we are better, we can’t go back. No, no, manager, I will not do that. A person sees much more. [A26]

This category is connected with the societal level, when critical thinking manifests as employees’ interaction with others in order to reach innovative decisions, which would add value to an organisation.

While analysing the research data, the search was not only for the answer to the question how does critical thinking manifest, but it was also an attempt to find out what inspires manifestation of critical thinking in every category.

In Category A, internal and external inspiration relates to a person: internal inspiration comes from a person’s courage: “How do I make a decision? You just turn on critical thinking, analyse and make a decision. You say: whatever else I accept, this is my decision. Whether it is right or not is irrelevant because I made the decision after considering all the circumstances” [A19], external inspiration comes from professional skills: “a student comes and he knows everything, and you tell him, take a cable, here are pliers, here’s a tip, please affix it. He does it at the fifth attempt, and you ask have you fixed it properly, he replies yes. He has no experience. When you explain what the standard is, how it should be, he becomes upset. But you encourage him by suggesting watching a training film.”[A15]

In Category B, a verified and assured decision to act is inspired by internal person’s attitude and desire to understand the professional activity better: “and you ask yourself, which would be the best, which combination would be the best. And you are searching for this. Maybe critical thinking is not in the first place, but it is, because it is important not only to find a decision for you but to find the best out of many”[A27]. External inspiration relates to a manager’s expectations for a reasoned decision: “Everything in our work should be assessed, analysed from all perspectives. We have meetings every Monday and we discuss everything, analyse, and prepare for the whole week. Our activity is focused and prepared in advance. To assess the situation quickly and to find a solution, I think, also is critical thinking, or at least part of it.”[A14]

In Category C, innovative decisions for operational improvement, internal inspiration is personal traits such as creativity and initiative: “<...> employees are more active, they make suggestions, they don’t sit calmly waiting to be told what to do. Not everyone. But there are success stories when employees come with their ideas, with initiatives.”[A13]. External inspiration for new ideas is conditions created by the manager that enable employees to do so: “<...> while giving the task, you encourage. The best examples are these people who work 110%. Their primary value changes at the end and you see that they did not 100%, but 110% or 120%. Such people as a rule have critical thinking. It is the best example of what kind of people are successful and their progress is much higher.”[A2]
In sum, phenomenography data analysis revealed three distinctive categories: a decision to act here and now (A); a verified and assured decision to act (B), and innovative decisions for operational improvement (C). These categories are supplemented by data variations. A decision to act here and now relates to reasoned decisions; a verified and assured decision is connected with analysing; innovative decisions are associated with new ideas for organisational progress. Research data show that critical thinking manifests at three levels: personal, interpersonal and societal. All categories are in hierarchical order: Category A is supplemented by the elements of Category B, Category C is complemented by the elements of Categories A and B, meaning that there are common traits in dominant employers’ opinions.

4. Discussion

Research data show that research participants’ experience about the expression of critical thinking of employees is in expanding focus from lower to higher order, e.g. from a decision to act here and now (Category A), via a verified and assured decision to act (Category B), to innovative decisions for operational improvement (Category C). Category A reflects the main direction of managers’ reasoning about critical thinking, as the main attention is paid to quick and urgent decision making. Category B reflects a wider viewpoint as research participants experience critical thinking not only as decision making here and now but as a verified and assured decision to act. Category C is even wider as research participants relate manifestation of critical thinking with innovative suggestions which are viewed as progress of an organisation. Therefore, three categories represent the hierarchy, where Category B is considered as more inclusive than Category A, as it inevitably had features that characterise Category A. Similarly, Category C is considered as more inclusive than Category B as it has inherent features that characterise Categories A and B (Picture 2).

![Picture 2. Hierarchic interconnection between categories](source: developed by authors)

This hierarchical order could be illustrated by data from a particular case. For example, a research participant explains: “If an employee solves a here and now situation and only tells you that this was such a situation and he dealt with it in such and such a way, and you see that he did well, in a way you would do (or even better than you), then you understand that you should promote that person and he definitely has critical thinking” [A19]. In Category B fall his words that it is not enough to make decision here and now, it is necessary to analyse the situation and to reason one’s own decision: “How to make a decision? You switch on critical thinking, analyse, and make the decision” [A 19]. This example shows that every higher category has additional categories which enrich it and which were not part of the lower categories. Research data reveal structural aspects which describe employers’ experience of manifestation of critical thinking in every category: at personal, interpersonal and societal levels. Category A relates to employers’ attention to particular employees’ activities when they need to
make decisions in an urgent situation in the workplace. Category B relates not only to urgent solutions, but also that they would be verified and assured. Category C is complemented with elements from Categories A and B – the verified and assured decision should be made here and now and be innovative, contributing to the progress of an organisation.

Research findings about employees’ critical thinking correspond to previous research but also give new insights. Many authors (Penkauskienė et al. 2019; Powley, Taylor 2014; AMA 2012; Kreitzberg, Kreitzberg 2011) agree that employers value employees’ skill to react quickly to changing situations and to make decisions. Penkauskienės et al. (2019) emphasise that employers relate critical thinking to employees’ skills to avoid mistakes and make the right decisions, to correct and regulate themselves, and with social responsibility. Powley, Taylor (2014) argue that critical thinking manifests and helps more in making decisions in crisis, facing the challenges. The American Management Association survey (AMA 2012) showed that employers define these critical thinking skills: to make decisions, solve problems and to take action. According to Kreitzberg, Kreitzberg (2011) in the contemporary business world employees should quickly think and make decisions in uncertain, complex, and changing situations. Manifestation of critical thinking relates to the skill to make a reasoned decision to act and to act confidently. Similar findings are in research by Rahman (2019), Özgenel (2018), Franco et al. (2017), and Grossman et al. (2014). Findings of the research correspond to the data about reasoned decision making (Ganzer-Ripoll et al. 2019; Hansson, Hirsch Hadorn 2018; Bouwmeester 2013). Ganzer-Ripoll et al. (2019) analysed the group decision making process and the role of reasoning in the process. Bouwmeester (2013) discussed the role of reasoning in strategic decision making.

The research has revealed new insights into manifestation of critical thinking as innovative decision making. According to researchers (Bektaş et al. 2019; Terzić 2019) innovation is the main indicator of economic growth, which facilitates effectiveness and profit. It could be assumed that employers who value the progress of the organisation see critical thinking manifestation in it. Critically thinking employees are able to generate new ideas and unafraid to reject the old ones in the best interests of the organisation.

5. Conclusions

The findings of the research have theoretical, methodological and practical significance. This is the first phenomenography research in Lithuania of employers’ experience about the expression of critical thinking of employees. Research about the match of employees’ critical thinking skills with the expectations of employers and labour market needs in Lithuania extends the field of phenomenography studies worldwide about critical thinking.

Empirical data allow identifying critical thinking related expectations of employers who anticipate that their employees could deal with emerging situations and are able to reason chosen decisions. Employers state that the critically thinking employee could make innovative suggestions; research participants describe critical thinking as higher order reasoning which gives added value to an organisation. Such understanding reflects the definition of critical thinking as a cognitive endeavour, directed to functionality in making decisions and solving particular problems.

Critical thinking by employees manifests at personal, interpersonal and societal levels. Employers explain critical thinking as employees’ skills to make decisions and to justify them as reasonable at all levels. Another important element of critical thinking is employees’ skill in working together with others.
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Valdonė INDRASIENE, Doctor of Social Sciences (Education), Professor, Director of Institute of Educational Science and Social Work, Mykolas Romeris University. Research interests: social pedagogical facilitation, educational technologies, social research. ORCID ID: orcid.org/0000-0001-9917-4526.

Violeta JEGELEVICIENE, Doctor of Social Sciences (Educational Science), Associate Professor, Mykolas Romeris University, Institute of Educational Science and Social Work. Research interests: social research, learning motivation, competence of pedagogues. ORCID ID: orcid.org/0000-0001-6437-8342.

Odeta MERFELDAITE, Doctor of Social Sciences (Educational Science), Associate Professor, Mykolas Romeris University, Institute of Educational Science and Social Work. Research interests: teamwork, social pedagogical aid, social partnership. ORCID ID: orcid.org/0000-0002-8217-7699.

Daiva PENKAUSKIENE, Doctor of Social Sciences (Education), Lecturer, Mykolas Romeris University, Institute of Educational Science and Social Work. Research interests: didactics, development of critical thinking, pre-service and in-service teacher training. ORCID ID: orcid.org/0000-0002-0875-4080.

Jolanta PIVORIENE, Doctor of Social Sciences (Sociology), Mykolas Romeris University, Institute of Educational Sciences and Social Work, Associate Professor. Research interests: social change, sustainable development. ORCID ID: orcid.org/0000-0001-6328-7940.

Asta RAILIENE, Doctor of Social Sciences (Educational Science), Associate Professor, Mykolas Romeris University, Institute of Educational Science and Social Work. Research interests: career education, social pedagogical aid. ORCID ID: orcid.org/0000-0002-8192-6184.

Justinas SADAUSKAS, Doctor of Social Sciences (Educational Science), Associate Professor, Mykolas Romeris University, Institute of Educational Science and Social Work. Research interests: ethics of social work, competence development, university studies. ORCID ID: orcid.org/0000-0002-1009-9193.

Natalija VALAVICIENE, Doctor of Social Sciences (Sociology), Mykolas Romeris University. Institute of Educational Sciences and Social Work, Lecturer. Research interests: sociology of migration, sociology of globalisation, migration of the highly skilled, demography. ORCID ID: orcid.org/0000-0002-8741-9909.

Register for an ORCID ID:
https://orcid.org/register