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Editorial

The current issue of *Psychology in Russia: State of the Art* opens with reports from the 4th Annual international research-to-practice conference "Early Childhood Care and Education" held on April 23rd - 25th 2015 at the Lomonosov Moscow State University (Moscow, Russia). The Conference brought major issues of early education and the prospects for further research in this field up for discussion, showcased the latest studies in early education, and succeeded in enhancing collaboration and network cooperation in the field of early education.

We would like to express our gratitude to all the speakers and participants for making the Conference so interesting and rewarding, and give our special thanks and recognition to Full Member of the Russian Academy of Sciences, Prof. Victor A. Sadovnichy (Chairman of the Organizing Committee), Prof. Nikolay E. Veraksa, (Chairman of the International Committee), and Full Member of the Russian Academy of Education, Prof. Aleksandr G. Asmolov (Chairman of the Program Committee). As another step towards participation in the international academic community, we hope that the Conference will enhance international dialogue and contribute to further development of quality of preschool education.

This year, Sweden was the Conference's Guest of Honor country, and the current issue presents its readers with a number of thought-provoking articles from Nordic keynote speakers that emphasize the importance of play in children's lives. Articles by Maelis Karlsson Lohmander and Ingrid Pramling Samuelsson discuss the intertwining of play and learning in early childhood education in Sweden. The author Elly Singer also presents profound reflections on play and playfulness in early childhood education and care. Liv Gjems and Sonja Sheridan S. provide the overview of how the topic of early literacy is presented in Norwegian and Swedish preschool teacher education.

Also, there are two articles on preschoolers' reflection and project thinking that may be potentially developed in this early age by means offered by the cultural-historical and activity approaches. Yulia Solovieva, Claudia Ximena González-Moreno and Luis Quintanar present indicators of reflection during acquisition of symbolic actions in preschool Colombian children. Aleksandr N. Veraksa and Nikolay E.

Veraksa describe the experience and results of implementing technique of project activity in Russian preschool educational establishments.

Furthermore, there are studies of preschoolers' collaborative activities with their parents. Anna A. Shvedovskaya and Tatyana O. Archakova developed the activity-based classification of parent-child interaction styles in families with preschool-age children. Vladimir S. Sobkin and Ksenia N. Skobeltsina reveal peculiarities of parents-children interaction during family pastime in different types of families.

The *Psychology of personality* section contains four articles approaching the issue of human personality from different standpoints. Sergey A. Kapustin provides a theoretical research outlining an existential criterion for normal and abnormal personality based on the works of Erich Fromm. Victoria R. Manukyan, Larisa A. Golovey and Olga Yu. Strizhitskaya explore formation of personality's psychological maturity in relation to adulthood crises. Ilya V. Pluzhnikov and Vasily G. Kaleda apply A.R. Luria's approach to neuropsychological findings in personality disorders. Olga Yu. Zotova and Larisa V. Karapetyan investigate occupation as a factor of personality's subjective wellbeing.

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SPECIAL SECTION:
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Early literacy in Norwegian and Swedish preschool teacher education

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Since the turn of the century, politicians in the Scandinavian countries have placed great emphasis on early childhood education and care. They have been especially concerned with lifelong learning in the field of language learning, early literacy, and numeracy. Almost all children between the ages of 1 and 6 years attend a preschool, and the quality of the learning environment is of great importance. This article presents a comparative study of student preschool teachers' conceptions of the knowledge that they claim to have acquired about children's early literacy throughout their bachelor education in Norway and in Sweden. The aim is to compare responses to a questionnaire administered to the student teachers and to examine the similarities and differences in the content of and goals indicated in the two countries' national plans for early literacy. This study is based on sociocultural theories and has a multimethod design. First, through a discourse analysis we examined the national plans for preschool teacher education in Norway and Sweden and studied similarities and differences. Second, we sent a questionnaire to all student preschool teachers at all universities and university colleges in Norway and at the University of Gothenburg. The differences between the Norwegian and Swedish education students were most obviously seen in their responses to the questions about how they work with early literacy. The discourse analyses showed that the national education plans for preschool teacher education in the two countries differ in certain instances but share common ground in others.

Keywords: early childhood education, language learning, early literacy, preschool teachers, preschool teacher education, comparative study

Introduction

Laying the groundwork for early literacy education requires that student preschool teachers know how they can support early language learning in young children (Neuman & Marulis, 2010). This article presents a comparative study of student preschool teachers' conceptions of the knowledge they claim to have acquired about children's early literacy throughout their bachelor education in Norway and Sweden. We administered questionnaires to student preschool teachers (student teachers, hereafter) in Norway and Sweden. We then related the results of the questionnaire analyses to the national plans for preschool teacher education in both countries, with a focus on early literacy learning (Ministry of Education and Research, 2003–2009; Swedish National Agency for Education, 2010).

The aim of this study was twofold: to compare the questionnaire responses of the student teachers and to examine the similarities and differences in the content of and goals indicated in the two countries' national plans.

Thus far, no comparative study has focused on the policies, philosophies, and intentions of Nordic countries with regard to preschool teacher education. Comparative research is crucial to enable learning from different perspectives and to emphasize educational issues that are taken for granted. Providing the innovation required in education is difficult when only a single country's policies are examined. The need to go beyond the familiar and to uncover new perspectives has become a powerful argument for comparative studies.

The research questions that this study aims to answer are as follows:

(1) What conceptions about early literacy have Norwegian and Swedish student teachers gained in their education?

(2) What information is provided and what intentions are articulated regarding early literacy in the two countries' national guidelines for preschool teacher education?

Contextual background

This study is built on the theoretical viewpoint that knowledge is constructed through interaction both among people and between people and artifacts in cultural contexts (Säljö, 2006; Vygotsky, 1931/1981). In this study, therefore, the meaning ascribed to early literacy is situated and constructed in the interaction between people and policy in Norway and Sweden.

Bennett (2010) describes two pedagogical approaches to early childhood education: the social pedagogical approach and the preprimary approach. These two approaches differ in focus, process, the presence or absence of predefined goals in relation to values, the knowledge and skills that children are expected to acquire in preschool, and the requirement or nonrequirement for documentation and assessment. The social pedagogical approach focuses on the development of social competence: it aims to empower children as active participants who can influence their own lives by strengthening their identity and self-esteem. The preprimary approach focuses on academic learning, teaching, and cognitive learning and development to prepare the child for school.

Preservice teacher education

An educational program significantly influences the conceptions developed by university educators and student teachers regarding the content of their education and the teaching profession. Polat (2010) defines educators' and student teachers' conceptions as "an inter-dependent complex system of [an] experiential, affective, cognitive, and metacognitive repertoire of perceptions, perspectives, ideologies, knowledge, theories, and principles that are somewhat related to teachers' decision-making and instructional practices" (p. 196). Borko (2004) categorizes teacher knowledge as three distinct types: understanding the concepts being taught (what), understanding how these concepts should be taught (how), and understanding why they should be taught (why). In the current work, we examined these three knowledge types via a questionnaire administered to the student teachers and via analyses of the national plans, and we also looked at how these plans combine the three knowledge types.

A Swedish study highlights a fourth knowledge type that is related to preschool teachers' competencies: interactive, relational, and transactional competence (Sheridan, Williams, Sandberg, & Vourinen, 2011). These competencies are relational, are mutually intertwined, and develop in interaction with knowing what, knowing why, and knowing how. This fourth knowledge type encompasses teachers' communicative, social, and didactic competencies, as well as their ability to care. All these proficiencies are critical for inspiring preschool teachers to develop so that they can meet their goals in line with preschool curricula.

Early literacy

Early literacy refers to the development of literacy in the years from birth to the age of 8. To become skilled learners and readers, children need a number of competencies, including a rich language and conceptual knowledge, a broad and extensive vocabulary, and verbal reasoning abilities; these skills are necessary for them to understand messages that are conveyed in pictures and in print form (Filmore & Snow, 2003).

A large-scale longitudinal study by Sylva et al. (2010) indicates that children learn language more effectively in a high-quality than in a low-quality preschool; a high-quality preschool combines communication, collaboration, and creativity into a pedagogical approach implemented by the teachers. These results support a Swedish study that indicated that children as young as 2 years old experience better language development in high-quality than in low-quality preschools (Sheridan, Pramling Samuelsson, & Johansson, 2009).

Methods

This study was initiated in 2012 and is related to the curricula currently required in Norway and Sweden (the 2003–2009 and 2010 curricula, respectively). First, we administered a questionnaire to student teachers in Norway and at the University of Gothenburg in Sweden. The questions were designed to determine *what* the student teachers regard as knowledge worth acquiring, *why* this sub-

ject matter is important, and *how* this subject matter can be taught in practical pedagogical work. Second, we performed discourse analyses to compare the similarities and differences in the national plans of the two countries in regard to early literacy.

Questionnaire

The questionnaire measured the student teachers' conceptions of what they had learned. It had two parts. The first asked the student teachers 50 questions about the degree to which they believed their preschool teacher education had provided them with knowledge about early literacy, among other subject fields. The student teachers were asked to rate the items on a scale ranging from "to a small extent" to "to a very high extent." The second part of the questionnaire required the student teachers to consider 71 assertions about central subjects in their education and what they believed a preschool is and should be. Like the items in the first part of the questionnaire, the assertions were rated on a scale that ranged from "disagree" to "agree."

In Norway, a print version of the questionnaire was distributed to the student teachers at the end of their third year of bachelor education at all the university colleges and universities that offer preschool teacher education (total = 1,061). The number of student teachers who returned their questionnaires was 898, giving a response rate of 85%.

In Sweden, the print version was administered to student preschool teachers at the end of the second year of the new preschool teacher program (2011). Out of 100 students, 85 returned their questionnaires, again yielding a response rate of 85%.

Results

The student teachers in Norway and Sweden agreed about the central values related to what Einarsdottir and Wagner (2006) call the Nordic approach. In the subject field related to play and learning, the answers of the student teachers were mostly similar. The descriptive analysis showed that considerable consensus was present among the student teachers with regard to the outcomes of learning in general. In most of the subject fields, the majority of the student teachers agreed that they had gained knowledge to a large extent.

Table 1. To what degree do you believe your education has provided you with knowledge about how you can promote young children's language learning?

	To a small extent, %	To some extent, %	To a large extent, %	To a very large extent, %
Norwegian	7	31	43	19
Swedish	2	15	60	23

p = .003

However, the responses of some of the student teachers reflected disagreement with the views of the majority. Looking into single variables, we found differences among the respondents in several of the fields. Specifically, the student teachers' responses substantially differed in regard to early literacy, which is the main focus of this study. Table 1 shows the differences between the Norwegian and Swedish student teachers' conceptions of how much they learned about children's early literacy.

An obvious difference existed between the student teachers from the two countries in how they measured their knowledge about early literacy. A full 60% of the Swedish student teachers believed that their education provided them with such knowledge to a large extent, and 23% believed it did so to a very large extent. By contrast, 43% of the Norwegian student teachers believed that their education provided them with such knowledge to a large extent, and 19% believed that it did so to a very large extent. Comparison of the "large" and the "very large" groups shows a 21% difference between the two student teacher groups in their conceptions of the degree to which they had learned about young children's language learning. More than twice as many Norwegian student teachers in comparison with Swedish student teachers stated that they had learned about this issue to only a small or moderate extent (38% versus 17%). These findings suggest that Swedish preschool teacher education emphasizes young children's language learning more than Norwegian education does.

Table 2 shows the responses of the student teachers to a question regarding the type of knowledge that they had acquired about language. Here again, the student teachers of the two countries differed in their responses. Of the Norwegian student teachers, 34% reported that to a small or moderate extent they had acquired knowledge about how to encourage children to talk about their experiences. By contrast, only 13% of the Swedish student teachers provided the same response. Among the Swedish student teachers, 39% agree that they have learned this skill to a very large extent, whereas 17% of the Norwegian student teachers provided this answer.

Table 2. To what degree do you believe your education has provided you with knowledge about how you can encourage children to talk about their experiences?

	To a small extent, %	To some extent, %	To a large extent, %	To a very large extent, %
Norwegian	3	31	50	17
Swedish	2	11	48	39

$p < .000$

Overall, in regard to language learning and early literacy, the Swedish student teachers believed they had learned more than did the Norwegian student teachers.

In the 71 assertions, many of which are directly related to work with early literacy, the student teachers differed substantially in their reactions to the assertions related to early literacy and the role of preschool as part of the educational system. They differed especially about the assertions on book reading and the division of education between preschool and the higher grades. Table 3 presents the reactions to the assertion on book reading.

Table 3. Preschool teachers should read to children only when the children ask.

	Disagree, %	Partly disagree, %	Partly agree, %	Agree, %
Norwegian	37	25	21	17
Swedish	0	5	45	50

p = .000

The student teachers from the two countries provided very different responses to these assertions. Of the Norwegian student teachers, 62% disagreed or partly disagreed that preschool teachers should read to children only when the children ask to be read to, whereas only 5% of the Swedish student teachers offered the same response. Of the Norwegian student teachers, 17% agreed with the assertion, and 50% of the Swedish student teachers agreed. This difference contrasts with the correspondence observed in the responses to the questions on early literacy.

Table 4. When reading books, preschool teachers should ask questions only as a way to control/monitor listening in class.

	Disagree, %	Partly disagree, %	Partly agree, %	Agree, %
Norwegian	37	25	39	9
Swedish	4	17	46	33

p = .000

Regarding the assertion that teachers should ask questions only to exercise control over or to monitor listening in class (Table 4), the student teachers from the two countries gave different responses. Of the Norwegian student teachers, 62% disagreed or partly disagreed with the assertion, whereas only 21% of the Swedish students provided these responses. By contrast, 79% of the Swedish student teachers partly agreed or agreed about the use of questions as a monitoring/control measure for listening in class. Among the Norwegians, 48% agreed. A question that arises from these findings is whether Swedish educators more strongly value the books being read to children or ensuring silence as they present literature. An interpretation is that the Norwegian student teachers have broader

views and aims with regard to reading than do the Swedish student teachers. The issue that arises from this explanation is whether the Norwegian student teachers learn that children's participation in and influence on reading books is more important than the book itself.

Conclusions. The differences between the responses of the Norwegian and the Swedish student teachers are most obviously seen in regard to the questions about how they work with early literacy. Norwegian preschool teacher education appears to emphasize the *what* and *why* elements (Borko 2004) more strongly than the *how* elements, whereas Swedish education equally espouses all three elements.

The foundation of literacy is vocabulary, and the Swedish student teachers more than the Norwegian student teachers appear to believe that they learned about this topic. When it came to book reading — a well-documented and recommended activity for learning about words, sentences, and texts — the student teachers responded differently. The responses of the Swedish student teachers indicated that they deemed book content more important than discussing what had been read, whereas the responses of the Norwegian student teachers pointed to a preference for allowing children to talk instead of merely presenting the contents of a book. The discourse analyses of the national guidelines may explain some of the differences in these student teachers' conceptions.

Discourse analyses

Discourse analysis is an approach to examining not only written and spoken ideas and knowledge (Jørgensen & Phillips, 2002) but also attitudes, the manner in which topics are addressed, the terms of reference used, and the social practices embedded in conventions (Phillips, 2007). The discourse within social practice that we examined in this study is written material about how the topics of early literacy are constructed in the national plans for preschool teacher education.

The Norwegian and Swedish national plans were examined to acquire knowledge about the field as described in the documents — that is, *what* the student preschool teachers should learn about children's early literacy learning. We then investigated the proficiency that student teachers are expected to gain — that is, *how* to work in this field and the goals the student teachers will attain through their education, or, in other words, *why* this field is important and for whom and for what.

We initiated the analyses by examining the words that are highlighted and most frequently used to refer to early literacy in the documents. According to Jørgensen and Phillips (2002), the choice of words and how they are connected are an important starting point for analysis because words have a significant function in the construction of meaning and values. The documents were read following the steps presented in Table 5.

With reference to the table, the progression of the analyses proceeded from the left column to the right. In the first reading, the question we examined was about conspicuous concepts. We began by identifying the intentions articulated in the two plans and the items related to early literacy. The next step was to look for how

Table 5. Analytical process

	Purpose	**Analytic strategies**	**Research questions**
Reading 1	Identify the content regarding early literacy in the national plans.	Determine the frequencies of central words: language learning/development, phonological awareness, concept learning, oral/ written language.	What concepts about early literacy are conspicuous?
Reading 2	Through the concepts revealed in the first reading, identify how the national plans construe early literacy.	Discover the words that are most frequently connected to the topic of early literacy.	How is early literacy construed in the national plans?
Reading 3	Discuss the construction of content related to what, how, and why.	Compare the scope of the content related to what, how, and why.	What is the most highly valued topic in the national plans?

frequently the central words relating to early literacy occur and whether or how they are connected to other subject areas. The second reading built on the concepts we identified in the first reading, and we followed through by identifying them across the documents to determine whether or how they contribute to the development of the early literacy field. We also looked for the most frequently used words in the field. In the third reading, we searched for the factors that teacher education programs in the two countries emphasize as the most valuable and specifically those factors that drive future preschool teachers to learn about early literacy. We began by scrutinizing the areas concerned with what student teachers should learn, why they should learn this subject matter, and whether the manner by which work is carried out in early literacy is emphasized.

Findings on the Norwegian national plan. The first reading revealed that the concept most frequently related to early literacy in the Norwegian national plan is *language*. The only recommendation in the plan for the pedagogy course related to early literacy is that the student teachers "shall learn to be sensitive towards small children's bodily and verbal signals." This finding prompted us to analyze the plan for the Norwegian language course, in which the concept of language occurs 24 times. Searching for the contexts in which the word occurs, we found that it is used 20 times in connection with student teachers' own language learning. Language is mentioned only 4 times in relation to children's language learning and early literacy. In one instance the document states that student teachers need knowledge of children's language development; in another instance, the document articulates the importance of understanding the concepts that lay the groundwork for reading and writing; and one other instance pertains to the relationship of language to narration and read-aloud activities in preschool. In addition, in one instance the document states that student teachers should learn about children who speak

Norwegian as their second language and children with language disabilities. The conclusion drawn from the first reading was that language is presented in general terms, whereas phonological and language awareness are never mentioned. The plan stipulates the need only for student teachers to acquire "knowledge about children's language development."

In the second reading, we focused particularly on how early literacy is constructed in the national curriculum. The concepts found in the first reading, *language learning* and *learning to read and write*, formed the basis of the analysis. The analysis revealed that children's oral and written language development is mentioned only once: "student teachers shall have knowledge about children's oral [language] and commencement of written language."

The national curriculum introduces the subject plan for Norwegian student teachers by stating that "the subject has aesthetic dimensions. It is the starting point for thinking, experiencing and communication, and is a fundamental cultural factor. Through language, children develop as participants and they meet a manifold of impulses" (p. 46). This quote summarizes the main findings from the analyses of this subject plan: the primary focus is on children's language as a tool for communication and participation in cultural activities.

The third reading indicated that the *what* element of the national plan focuses mainly on student teachers' own oral and written language learning. The *how* element that addresses children's early literacy is mentioned once, in a requirement that student teachers learn to arrange for "children's cultural creativity and invite them to tell." The *why* element is an important part of teaching and working with early literacy because language is closely related not only to reading and writing but also to cognitive development and problem solving. Nonetheless, this element is not referred to anywhere in the national plan.

In the national plan the aspect that is considered the most valuable in relation to early literacy is that student teachers must become well-versed in their own language and obtain knowledge about the cultural and esthetic elements of language. Important questions are what this national plan communicates to educators at university colleges and how these views are expressed in local programs and conveyed to student teachers.

Findings on the Swedish national documents. In total, the Swedish national enactment document on preschool teacher education and exams is three pages long, and the contents are structured as goal areas. The first reading of this document revealed that the concepts related to early literacy are *communication*, *language development,* and *learning to read and write*. Each concept is referred to once and in relation to the requirement for student teachers to obtain knowledge and understanding of children's learning within this goal area. In the goal area of the skills and abilities that the student teachers are required to develop, communication is mentioned three times, whereas listening, talking, and writing are each referred to once. Digital tools, media, and digital environments are also remarked on once in relation to early literacy. The conclusion drawn from the first reading was that concepts such as communication, language development, and learning to read and write are presented in general terms throughout the document.

The second reading focused on how the subject of early literacy is constructed in the national document. The analysis indicated that "student teachers shall show an in-depth knowledge about children's communication and language development" and "student teachers shall show knowledge of basic learning in how to read and write." Furthermore, student teachers are required to "demonstrate communication skills in listening, speaking and writing." Student teachers are also enlisted to "demonstrate the ability to communicate in a broad sense" the (for example) fundamental values of "human rights and basic democratic values." Another goal in this area is that student teachers should "demonstrate the ability to safely and critically use digital tools in educational practice and consider the role of different media and digital environments in this." Thus, early literacy is constructed as student teachers' knowledge of children's language learning, basic knowledge of how to read and write, and the ability to communicate in a variety of areas.

The third reading focused on the *what, how,* and *why* elements of the national plan. Overall, the third reading revealed that the *what* element is given sufficient attention, whereas the *how* and *why* elements are disregarded. This approach is understandable because the Swedish guidelines and plan focus on the *what* aspects; the *how* elements are expected to be addressed by practicing professionals. The objective is for student teachers to develop broad communicative competence and in-depth knowledge of children's communication and language development.

Conclusions. The discourse analysis demonstrated that the national education plans for preschool teacher education in the two countries differ in certain instances but share common ground in others.

In regard to *differences between the two plans in their focus on language learning, language* is the most commonly mentioned concept in the Norwegian plan. The concept is used primarily in general terms and in relation to the Norwegian language course. Early literacy is expressed in the plan for the pedagogy course as student teachers' development of sensitivity to children's verbal and bodily signals and not as language learning. In the plan for the Norwegian language course, the word *language* is used primarily in connection with student teachers' own language learning and competence, which are, of course, central to children's language learning.

In the Swedish plan, the concepts of *communication, language development, and learning to read and write* are presented in general terms. The plan focuses on children's communication and language learning and on the language learning and understanding required of student teachers.

The difference between the two plans is that the Norwegian plan uses the concept of language mainly in relation to student teachers' own learning, whereas the Swedish plan uses the concepts of language and communication in relation to children's and student teachers' language learning. In the Norwegian plan, children's language is viewed primarily as a tool for communication and participation in cultural activities. The Swedish plan states that student teachers should possess in-depth knowledge about children's early literacy learning and display wide-ranging communicative competence.

These findings were reflected in the responses of the Swedish student teachers to thequestionnaire. The responses indicated that the Swedish group more than the Norwegian group believed that they had gained knowledge concerning children's language learning.

In regard to *differences between the two plans in their requirements for the knowledge required of preschool teachers,* the two plans focus primarily on student teachers' own language learning, although this idea is more strongly emphasized in the Norwegian plan. The main differences between the plans is that the Swedish plan far more explicitly refers to language as an avenue for children's development and as a communicative skill to be used in many areas. The Swedish plan focuses extensively on future preschool teachers' knowledge about children's early literacy learning. From the Norwegian plan, student teachers learn that language is primarily a skill that children should develop as a tool for participation in cultural activities.

The differences in content and intentions in the national plans were also confirmed by the questionnaire answers. Compared with the Norwegian student teachers, the Swedish group stated that they had learned more about how to promote children's language learning, how to encourage children to talk about their experiences, and the importance of reading to children.

Discussion

The results of the questionnaire and the discourse analyses of the national plans revealed the relationships between the student teachers' conceptions of their own early literacy learning and the intentions expressed in this area by the two countries' national plans. The relationships emerged when the Swedish student teachers stated that they regarded integrating children's early literacy learning with care and play as being aligned with the intentions expressed in the Swedish national plan; the Norwegian student teachers' responses showed that they had learned about children's language learning and early literacy to an extent lower than that achieved by the Swedish student teachers. This difference can be attributed to the content of and intentions articulated in the Norwegian national plan.

The Norwegian plan can be interpreted as grounded in a social pedagogical approach (Bennett, 2010) that focuses on student teachers' development of sensitivity to children's communicative expression and participation in cultural activities. The Swedish curriculum is more learning oriented, and it more explicitly emphasizes the importance of student teachers' knowledge about children's early literacy learning, their knowledge of how to instruct children as they learn a language, and their skills in doing so. The Swedish plan more clearly articulates the knowledge demanded of future preschool teachers, whereas the Norwegian plan underscores sensitivity to children's language learning and knowledge about language as a tool for realizing objectives such as participation in cultural activities.

The differences in plan contents can explain some of the dissimilarities between the two student teacher groups in the questionnaire responses about how to promote young children's language learning and how to encourage exchange (talking). An intriguing finding is that the Swedish student teachers do not emphasize the importance of discussing the books that they read with children. Most

of them also stated that they intend to read to children only when the children ask to be read to, whereas the Norwegian student teachers disagree with this perspective. In the Norwegian national plan, the scheme for the Norwegian language course emphasizes student teachers' knowledge of the quality of books and book reading as an esthetic activity and critical exercise for language learning. Whether this difference is due to dissimilarities in the early literacy subjects offered by the teachers' educational programs or whether it is related to other circumstances is impossible to determine. It may be linked to conceptions regarding preschool teachers' roles: Swedish future preschool teachers may be more concerned with the purposes of book reading, whereas the Norwegians may be more inclined to focus on children's participation.

The emphasis on play and child autonomy as the most important avenues of learning in the Norwegian plan can encourage educators and students teachers to pay little attention to early literacy and to exercise excessive consideration for care, social competence, play, and participation. The Swedish plan for preschool teacher education emphasizes the importance of language learning, as well as the learning of concepts that are fundamental to mathematical knowledge, in early childhood. Nevertheless, the guidelines clearly express the importance of play and children's right to participate, play, and choose the activities in which they prefer to engage. Early literacy and numeracy are valued as essential knowledge for children to develop and are not emphasized at the cost of children's autonomy, play, and participation; this approach aligns with the recommendations from research (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2010).

The current study reveals the influence that national plans can exert on the competencies taught in preschool teacher education in different countries. Since the turn of the century, research on the importance of early literacy and language learning for all children has emerged, particularly for those who speak minority languages and those from homes with poor language support (August, Carlo, Dressler, & Snow, 2005; Melhuish, Phan, Sylva, Sammons, Siraj-Blatchford, & Taggart, 2008; Siraj-Blatchford, 2007, 2010). The national plan for Swedish preschool teacher education corresponds with the findings of the present research; Norway, however, is one of the few countries in Western Europe that substantially emphasizes care and participation (Vallberg Roth, 2014). The challenge for future preschool teacher education is to take into consideration relevant research on the importance of early childhood education in language learning and early literacy. Research highlights the importance of enabling children to develop linguistic knowledge and skills in the early years (Siraj-Blatchford 2007). An important requirement, therefore, is for student teachers to develop specific linguistic and communicative knowledge and competencies so that they can effectively structure children's early literacy learning. These are subject fields that can be thoroughly combined with care, play, and participation, as in the Swedish national plan for preschool teacher education and the preschool curriculum.

Acknowledgments

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Play and learning in early childhood education in Sweden

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Learning through play is a common phrase in early childhood education worldwide. Play is often put forward as the overarching principle for working with young children (Johnson, Christie, & Wardle, 2005). However, if we go beyond the rhetorical level and explore how "learning through play" and a "play-based curriculum" are understood and transformed into practice, we may find differences both within and between countries (Karlsson Lohmander & Pramling Samuelsson, 2014a, 2014b; Pramling Samuelsson & Fleer, 2009).

In this article we discuss the relationship between the concepts of play and learning and describe how they are enacted in everyday practice in early childhood education in Sweden. Starting with a brief presentation of the development of early childhood education, we then reflect on the challenges preschool teachers may encounter when trying to implement a new learning-oriented curriculum (National Agency for Education, 2011) and still trying to keep play as a central dimension in children's everyday life in preschool.

Keywords: early childhood education, Sweden, preschool, play, learning

Introduction

In Sweden, early childhood education dates back to the late 1800s / early 1900s. In a context of urbanisation and industrialisation changing life situations for many families brought with them the need for some kind of childcare. In the beginning a parallel system for the care and education of the youngest children was developed. Children aged 5 to 7 years from better-off families were offered educational activities structured by the teacher in part-time preschools/kindergartens (also called play schools). For children from poor families and from single-parent families, full-time provision focusing on care was offered. This parallel system remained until the end of the 1960s, when women in large numbers entered the labor market and the demand for nonparental childcare rapidly grew (Karlsson Lohmander, 2002).

In 1968, the government appointed the national Commission on Child Care (Barnstugeutredningen), which was assigned to propose goals and guidelines for

the future direction of the childcare system in Sweden. In 1972, the Commission published a report (SOU, 1972: 26–27) proposing that the existing parallel system of care for poor children and education for better-off children be replaced with a new childcare system in which social, educational, and care needs would be integrated. The major part of this system would be day-care centers for children from 1 to 7 years (Karlsson Lohmander, 2002). While maintaining a clear educational focus, childcare, together with parental-leave insurance and child benefits, has been a cornerstone in the developing Swedish welfare policy since the beginning of the 1970s. This is explicitly expressed in the overall aims:

> … to make it possible to combine parenthood with employment or studies
>
> … to support and encourage children and help them grow under conditions that are conducive to their well-being (Skolverket, 2000, p. 3)

With reference to Freire (1970/1972), a "new" emancipatory teaching method of negotiation and dialogue (*dialogpedagogik*) (SOU, 1972:26–27; Strömberg-Lind & Schyl-Bjurman, 1976) was introduced: communication (teacher-child and child-child) was to be at the forefront. This method was soon criticized (Callewaert & Kallós, 1975). Kallós claimed that by concentrating on methods and social skills rather than on specific domains of knowledge, this teaching style became oppressive rather than emancipatory and could be disadvantageous to many children (Kallós, 1978). Grounded in the theories of Jean Piaget and Erik Homburger Erikson, child care had as overriding goals concept formation, communication with others, and development of the self (Schyl-Bjurman, 1976).

In the years that followed, the social pedagogy tradition, emphasizing the child´s social development and well-being, remained strong. Grounded in a democratic tradition (Johansson, 2011), it focused on children's participation and active involvement. Children's "free play" constituted an extensive part of the programme and underlined the value of informal and nonformal learning (Pramling Samuelsson, 2015).There was a distinct difference between preschool and compulsory school (SOU, 1985:22) in that in preschool adult-structured formal learning activities were considered to be detrimental for children.

Davidsson (2002) discusses the large difference between the two settings in *Between the sofa and the teacher's desk*. This title illustrates the problems with finding spaces for cooperation between preschool and school teachers. According to Davidsson, circle time was the only preschool activity that was found to be similar to classroom practice and was the one activity on which teachers from preschool and school could collaborate. There was however an ambition to bring the two institutions closer together to make the transition between preschool and school easier for children. Over the years how this linking should be done was debated by numerous national commissions (Karlsson Lohmander, 2002; Pramling Samuelsson & Mauritzson, 1997; SOU, 1975/76:39).

Since the beginning of the 1970s the number of children attending early childhood education programs has steadily grown; today, already at the age of 2 years, 89% of all children attend preschool. For 5-year-olds the corresponding figure is 95% (Skolverket, 2013). Preschool has indeed become an important agent in the upbringing and education of the young child.

The national curriculum for the preschool, Lpfö98

Some kind of general guidelines for early childhood education have always been in place — for example, the pedagogical program for the preschool (Socialstyrelsen, 1987:3). Even though these guidelines were not "an ordinance with binding regulations issued by the Government" (Vallberg-Roth, 2011, p. 17), in practice they functioned as a curriculum.

In 1996, the responsibility for early childhood education, now covering the ages from 1 to 6 years, was transferred from the Ministry of Social Affairs to the Ministry of Education and Research; preschool was integrated in the formal national education system and became the first step in a lifelong learning process. Concurrently, a new school form, the preschool class for 6-year-olds, was introduced. Following this transfer, in 1998 the first national curriculum for preschool was issued (Skolverket, 1998). Unlike the previous guidelines, it is based on a government decree and is therefore mandatory. The whole Swedish education system has since been covered by three linking curricula with a shared view on knowledge formation, development, and learning. The theoretical point of departure for the preschool curriculum is a sociocultural (e.g., Vygotskian) and experience-based approach (SOU, 1997:157); children are seen as active participants in their own development and learning. With democracy as the founding value, the curriculum specifies overriding goals and tasks but not the means to reach these goals. Decisions about working methods are left to the teachers, who are expected to have the professional knowledge and skills necessary for choosing these methods. Furthermore, the goals are for teachers to strive for, not for individual children to achieve. Each team of teachers has to make sure that the activities in the preschool are structured and organized to support children's overall learning and development.

In 2010 the curriculum was revised (National Agency for Education, 2011). New goals were introduced, and the learning dimension was strengthened. Compared with the 1998 version a stronger focus was put on early mathematics, emergent literacy, science, and technology. However, these domains of knowledge were not to be taught as traditional formal school subjects; rather, they were to be structured as theme work to allow children to actively participate in a meaning-making process.

As mentioned, play has been and remains an important dimension of preschool pedagogy. Even if learning is highlighted, the revised curriculum (National Agency for Education, 2011) still gives prominence to play: "The preschool should strive to ensure that each child develop their curiosity and enjoyment, as well as their ability to play and learn" (p. 9). Play is often linked to and perceived as a prerequisite for learning: "Conscious use of play to promote development and learning of each individual should always be present in preschool activities" (p. 3). This link between play and learning is grounded in research that shows how play can be a central part of a learning-oriented approach (e.g., Pramling & Pramling Samuelsson, 2011; Pramling Samuelsson & Asplund Carlsson, 2008). However, despite the grounding in research, focusing on play to promote learning in a conscious way is still not the case in all preschools in Sweden (Sheridan, Pramling Samuelsson, & Johansson, 2009; Skolinspektionen, 2013).

Structural and organizational factors affecting the implementation of the new learning-oriented curriculum

A number of factors affect how well preschool teachers work toward implementing a play-based, learning-oriented curriculum, among them group organization, group size, and child/staff ratio. In the 1970s a system of mixed-age groups for children aged 1 to 5 years, so-called sibling groups, was introduced. The main reason for this was financial (group size increased), although the official reason was pedagogical. Common practice until then was to place children in age-specific groups. A survey showed that the youngest children in preschool had fewer pedagogical activities than the older children, and this discrepancy was thought to be a consequence of the fact that at that time mainly nursery nurses worked with the youngest age group, not educated preschool teachers. It was hoped that the age-integrated groups would help change this situation and promote peer learning and toddlers' learning from older children (Familjestödsutredningen, 1979). Today the organization of the groups varies across the country. Of all preschool groups 35% are so-called toddler groups (1–3 years). The mean number of children in the groups (autumn 2013) is approximately 5.3 children per teacher, with a mean of 16.8 children per group. However, the variation of group size across the country is large; it ranges from under 15 children to over 26 children in one group (Skolverket, 2013, Table 4a).

The notion of group size in preschool has been extensively debated in Sweden. Parents and staff express worries about security when there are too many children in the groups. Furthermore, preschool teachers claim that with large groups it is difficult to work toward reaching the goals of the curriculum (Pramling Samuelsson, Sheridan, Williams, & Nasiopoulou, 2014).

Because dialogue and communication are at the forefront of teachers' work, albeit understood in a different way than in the dialogue pedagogy that was introduced in 1972, large preschool groups create problems for preschool teachers. In a study of group size in preschool (Williams, Sheridan, & Pramling Samuelsson, in press), the findings show that preschool teachers have different ways of facing and overcoming the challenge of having groups that are too large. For some teachers having many children in a group does not seem to be a problem; they work in line with the curriculum anyhow. Other teachers find it difficult and avoid certain activities, such as excursions outside the preschool or painting. All teachers claim that the discussions and dialogues with children become more shallow and that they feel they cannot challenge children as they would like to (Pramling Samuelsson, Williams, & Sheridan, 2015). The challenges experienced by the teachers are all related to teacher-structured learning-oriented activities. The teachers seldom, if ever, relate group size to children's play. When asked about good working conditions, they describe an ideal situation in which they can communicate with, challenge, and support each child to take part in a shared meaning-making process (Pramling Samuelsson, Williams, Sheridan, & Hellman, 2015). It seems as though preschool pedagogy is becoming individualised and that the understanding of preschool as a collective arena for children's learning has been lost. Furthermore, that play goes on without adult intervention regardless of the number of children in a group (Pramling Samuelsson, Wallerstedt, & Pramling, 2014).

Swedish preschool in an international perspective

As mentioned, in Sweden democracy is the foundation on which early childhood education should rest. Swedish preschool is based on the Convention on the Rights of the Child (United Nations, 1989), and inclusion, equality, and solidarity are emphasized (Karlsson Lohmander, 2010). According to the curriculum, preschool should provide a safe, rich, and enjoyable environment for children (National Agency for Education, 2011). In international comparisons early childhood education in Sweden often receives top ranking (e.g., Lien Foundation, 2012; UNICEF, 2008), as do the other Nordic countries. In the country review for the OECD (2001) the team looking at Sweden claimed that "the curriculum clearly enunciates the vision the Swedish society not only holds for its child-serving institutions but for children themselves. … Nothing honours Sweden more than the way it honours and respects its young" (OECD, 1999, pp. 24 and 43).

These are words to be proud of, but there are still many questions to ask. One concerns the quality aspects of education. The international comparisons are concerned mainly with how societies support children and families at a policy level. One example is the ten benchmarks for early childhood services that UNICEF proposed (2008, p. 2). Some of the suggested standards include parental-leave programs, staff-to-child ratios, and gross domestic product spent on early childhood services. In that sense early childhood education in Sweden is of high quality. But quality is also about goal fulfilment — that is, to what extent the objectives set out in the curriculum are reached and how well children are challenged and supported in their development and learning. Findings from both research and evaluations (Sheridan et al., 2009; Skolinspektionen, 2013) prove that in this respect the quality of preschool education varies across contexts. Whereas play has always been and still is at the forefront in Swedish preschools, apart from circle time, learning, understood as teacher-structured activities, has not been prominent. This emphasis on play differentiates Sweden from many other countries. A comparative study conducted in 1970 (Austin, de Vries, Thirion, & Stukát, 1975, 1976) showed, for example, that Belgium had a more learning-oriented approach with an active and distinguishable role for teachers, while in Sweden teachers were less proactive and thought that children learned best when they were allowed to organize their play by themselves without teacher intervention. It is possible that this perception still remains.

Facing pedagogical challenges in a changing society

When the new, integrated early childhood education system was introduced in the 1970s with the Ministry of Social Affairs as the supervising body, children's socioemotional development, well-being, and development of social skills were at the forefront. These goals, together with a focus on play, often free play, formed the pedagogical task of the preschool (day care at that time). As preschool was integrated into the national education system in 1996 and the first curriculum was issued in 1998 (Skolverket, 1998), a clearer focus was placed on learning. This emphasis was even more pronounced in the revised version of 2010 (National Agency for Education, 2011). However, the pedagogical task involves taking a holistic perspective

in which "care, socialisation, and learning form a coherent whole" (p. 4). This perspective creates challenges and sometimes problems for preschool teachers. First, they have to focus on the learning dimension while still keeping care, play, and well-being as central dimensions of their work. As mentioned, traditionally, formal learning was perceived as detrimental for children and the concept of teaching in preschool has been and still is controversial (Doverborg, Pramling, & Pramling Samuelsson, 2013).

A second challenge for teachers is to understand what constitutes learning content or learning objects for children in various areas. Most preschool teachers currently working in preschools were educated before the revised curriculum was issued, and teaching special content — such as, for example, science — is new to them. Teaching content was not part of their education (Pramling Samuelsson & Sheridan, 2010).

A third challenge is to keep care and education integrated and not to separate these two aspects. In a study on how to promote peer learning in preschool, when asked about the goals for their work, participating preschool teachers all mentioned promoting democracy as a value and developing trust in children as the overarching aims (Karlsson Lohmander & Löfqvist, 2008). This does not mean that they did not support children's learning. They did, but not always in a conscious, planned way. They did not seem to frame learning activities in a structured way so that children were aware of the knowledge they were supposed to acquire in any given situation (Doverborg et al., 2013). This ambiguity was also found in a study on constructions of play and learning that was conducted with international master's students in Sweden. They felt that it was difficult to discern and understand what was going on in Swedish preschools. Compared with their experiences of early childhood education in their own/home countries (the students came from Asia, Europe, and South America), Swedish preschools seemed to lack structured, goal-oriented learning activities. Children seemed to be only playing all the time. In line with one of Bernstein's (1973) concepts, the pedagogy appeared invisible to them.

Concluding remarks

The strengthened learning dimension and the increased focus on special domains of knowledge such as science and technology in the revised preschool curriculum has challenged preschool teachers to reflect on what the pedagogical task entails and how to transform the goals in the curriculum into everyday practice. What exactly is it that young children need to learn in preschool? What does play mean in the context of preschool education? What is the relation between the two?

Given that the curriculum states only the overarching goals, much is left to preschool teachers to interpret themselves. With the explicit focus on learning, some fear that there is a risk that play and children's influence, which is also emphasized in the curriculum, will decrease in favor of teacher-structured activities. Preschool researchers as well as preschool teachers are challenged to clearly articulate what the so-called Nordic approach (Bennett, 2010) entails when it comes to learning through play. It cannot be taken for granted that children learn when they are active participants in play. The teacher's role must go beyond just listening. Teachers have to understand what it means to direct children's attention toward learning objects,

while concurrently taking children's perspectives into consideration in interaction and communication (Pramling Samuelsson & Asplund Carlsson, 2008: Pramling & Pramling Samuelsson, 2011). This requirement includes an understanding of the importance of care and its relation to children's play and learning.

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Play and playfulness in early childhood education and care[1]

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Play and playfulness are basic features in early childhood education. The elements of play are pleasure, a sense of freedom, and the co-construction of shared meaning through the use of rules or rhythms. Play and learning are closely related in early childhood. But when the focus on the educational benefits of play becomes too strong, the most essential feature of play is lost: children's pleasure. Young children in group settings often have to adapt to the teachers' demands related to security, hygiene, and social norms and values. But the playfulness of the teachers helps to overcome differences in power in the caregiver-child relationship and prevents young children from becoming overburdened with strict rules and group discipline. Play and playfulness are a resource of shared pleasure and creativity in learning processes.

Keywords: play theory, play curricula, day care, teacher-child relationship, very young children

Introduction

The founding parents of early childhood education, such as Friedrich Froebel, Maria Montessori, and Lev Vygotsky, focused on the active playing and learning child (Singer, 1993)**.** Play and learning go hand in hand in young children. Formal curricula aimed at instruction and the transmission of knowledge are seen as teacher-centered. "Play curricula" were, and are, seen as child-centered and developmentally appropriate for young children. Many developmental studies have demonstrated the educational benefits of play (Walsh, Sproule, McGuinness, Trew, & Ingram, 2010). Neuropsychological studies have given new scientific arguments for the belief that play and learning are closely related in young children (Panksepp, 2012). During play, intense positive emotions, actions, and sensory experiences go hand in hand. Play experiences have a major impact on learning. But play cur-

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ricula in which play is used as an educational tool can have drawbacks. According to Sutton-Smith (1997), the belief in play as an educational tool has become so dominant that we tend to forget the playing child. Children's ideas of play generally center "on having fun, being outdoors, being with friends, choosing freely" (p. 49). But teachers tend to behave too "teacherly" and misuse children's play to attain their own educational goals, thus spoiling children's fun (Pramling Samuelsson & Asblond Carlsson, 2008). In this article I rethink the importance of play from the perspective of children and the perspective of teachers. I argue that play and playfulness are a resource of shared pleasure and creativity for teachers and young children. The playfulness of teachers helps to prevent young children from becoming overburdened with strict rules and group discipline.

What is play?

In *Homo Ludens* the Dutch historian Johan Huizinga (1938/1955) analyzes the phenomenon of play in human cultures. His play theory is still acknowledged as a ground-breaking study for modern theories about play. He writes: "First and foremost, all play is a voluntary activity. …Child and animal play because they enjoy playing, and therein precisely lies their freedom" (p. 8). The basic motive for play is the experience of pleasure that it affords. Huizinga gives the example of two puppies involved in play-fighting. "They keep to the rule that you shall not bite, or not bite hard, your brother's ear. They pretend to get angry. And what is most important — in all these doings they plainly experience tremendous fun and enjoyment" (Huizinga, 1955, p. 1). Humans also play for pleasure. These experiences can be captured only in qualitative descriptions of feelings like excitement, tension, release, uncertainty, togetherness, surprise, risk, balance. Children do not play for some educational benefit that is more valuable than play. For instance, 3-year olds do not jump up and down to practice motor skills but because jumping up and down is fun.

The play-world: rhythms, repetition, roles, and rules

Play presumes an intense relationship with the immediate social and physical environment. Children play with a friend or an adult, and they play with objects. In relation to other people and the surrounding environment, the playing child creates a play-world that is different from the "ordinary world." The child and play partner create a shared play-world by using rhythms, rules, and roles. Detailed analyses of parent-infant interactions, for instance, show how a shared play-world is created. The infant and parent communicate by imitating each other, through eye contact, by taking turns, and by repeating, varying, and improvising sounds and gestures (DeZutter, 2007; Trevarthen, 2011). The main goal of this communication is to make contact. These interactions have a rhythm and are structured like music and dance. The infant and family members start playing rhythmic body games and enjoy music, songs, and dancing, which become part of the fun of their life together. Their vocalizations and the movements of face and body follow rhythms; they follow patterns of sound and movement in time. Researchers such as Stern write about "socio-dramatic episodes" in which "emotional narratives develop" (Stern,

1977/ 2009). In playful interactions infant and parent "negotiate the invented life of meaning" (Trevarthen, 2011).

In play with the physical environment, there often is a rhythmic structure of repetition and variation as well. For example, a baby who drops an object listens for the "plop" and then looks questioningly and enthusiastically at the caregiver, who then has to pick up and return the object so that the baby can drop it again. Children explore the environment by imitating, trying out, repeating, and varying actions and observing the effects (Piaget, 1967).

With young children the rules and the structure of play are still simple and loose, and they can easily be changed during the course of play. The play of young children often has the character of a repeated series of actions. A 2-year-old's drumming of feet on the sofa can develop into a concerted drumming involving four or five children (Løkken, 2000). Children can allow these repetitive series of actions to grow into a more comprehensive ritual. For instance, lunch at the table may be concluded with singing, clapping of hands, and finally drumming with heels (Corsaro, 2010). A well-known example is the variations on the game of peek-a-boo, which children all over the world love playing either with their caretakers or with other children. In this context social constructivists speak of "co-construction" (Valsener and Vos, 1996). Through repetition and variations on series of actions, young children together with caregivers and other children co-construct a shared play-reality, a "magic circle."

Freedom to modulate experiences

Play is not "normal" or "actual" life. The players create a magic circle, which is different from ordinary life. But that does not mean that play is not related to serious issues that children experience in ordinary life. In role play children often act out experiences that have made a deep impression (Kalliala, 2006; Rogers & Evans, 2008). After a hospital admission children often play at being doctors. Mother-and-baby is a beloved theme in which the child plays out his or her most basic experiences with love, dependence, and power. By means of pretend play, children make their own subjective play-world out of experiences that have partially overwhelmed them. In play they can be the actor instead of the passive victim. They make the overwhelming experience their own. Play gives a child a sense of freedom and the subjective experience of shaking off the inescapable.

Play breaks through the rule of law that governs normal life. According to Rodriguez (2006) this concept is the cornerstone for understanding the meaning of play. Rodriguez argues that logical thinking and play fundamentally differ in their aims. The point of logic, as traditionally construed, is to establish unambiguous canons of correct reasoning: something is right or wrong, true or false. "In contrast, the fundamental aim of play is the *modulation of the player's experience*" (Rodriguez, 2006, p. 4). During play we can temporarily escape from the rule of law and obligations in normal life. Perhaps this escape is what makes play exciting: it gives us the freedom to change our experience of reality. Indeed, freedom is a feature that highly diverse forms of play have in common. A group of 2-year-olds who walk around a table laughing and screaming forget in their play all the times that they fall and get up again or the times they hurt themselves because they can't yet man-

age to run properly. A 3-year-old can enjoy playing child-at-the-doctor's without the anxiety caused by the fear that the doctor may do something that hurts. When a teacher reads aloud a story of a bear who has lost its mother, the children can enter into the story with pleasure, without feeling any actual fear of loss.

Play and the art of adaptation

Evolutionary psychologists and neuropsychologists show that play helps young animals learn about their physical environment and the behavior of peers and adult members of their group. Bjorklund (2007) hypothesizes: "When behavioural flexibility is important to an animal it is likely that some mechanisms would evolve that promote learning the vagaries of a changeable environment. Play is one of those mechanisms" (p. 145). In play, juveniles enjoy adapting to unexpected circumstances (Pellis, Pellis, & Bell, 2010). Neuropsychological studies show that the play system is a primary process that arises from ancient regions of the brain related to survival, just as does, for instance, the panic system, the care system, or the lust system. This primary play system helps to achieve the programming of higher brain regions. Most of the higher brain is created by experience (Panksepp, 2012). "Perhaps it [play] is especially influential in refining our frontal cortical, executive networks that allow us to more effectively appreciate social nuances and develop better social strategies" (Panksepp in American Journal of Play, 2010, p. 269).

Many behavioral and mental functions are refined during youthful play. The more complex the social life of a species, the bigger the brain size, the longer the period before juveniles reach mature adulthood, and also the longer the young can play without the burdens and obligations of adult life. In this respect Panksepp's (2007) study of Attention Deficit and Hyperactivity Disorders (ADHA) is interesting. Animals that have little play when young show stereotyped behavior toward peers and are deficient in regulating their aggressive urges when adults (Kempes, Den Heijer, Korteweg, Louwerse, & Sterck, 2009; Potegal and Einon, 1989). Although relevant research in human youngsters is scarce, there are good reasons for suggesting that play-deprived children also have less refined behavioral and mental skills for self-control. Studies show that problems with the inhibition of natural impulses are related to the development of ADHD and that daily sessions of playing rough-and-tumble diminish ADHD symptoms in boys.

Play and ordinary life in early childhood

In studies of the play of young children most attention is paid to the educational benefits of "pure play" — that is, activities in which the child is spontaneously engaged for fun and pleasure: babies' playful movements with legs and arms; babies' proto-conversations with parents and teachers; toddlers' physical play of running around and going down the slide; playful explorations in the sandpit and with physical objects; pretend play with cars and dolls in the household corner (Sutton-Smith, 1997). A varied range of possibilities for play is one of the important hallmarks of high quality of the upbringing of young children.

But young children do not live exclusively in the world of play. From the very beginning children are confronted with what Huizinga (1938/1955) calls "the ne-

cessities and obligations of the normal life." Children have to be looked after: they need to eat and drink, to be cleaned and changed, to sleep. From the children's perspective as well, not everything they do is play. They help and comfort other children; they help their parents and teachers with cleaning, cooking, and other chores of housekeeping (Post & Hohmann, 2000; Singer & De Haan, 2007a). A lot of the time of young children's parents and teachers is devoted to caring for them, with the caregivers adapting themselves to what the child is capable of and wants. But the young child adapts at least as much to the environment in which he or she is growing up. Children want to learn to take care of themselves. They want to learn from the adults and to contribute to the group: they want to grow up. The child learns the rhythms of sleeping and feeding as well as the customs, skills, and language of the culture (Lancy, 2008; Tudge, 2008). Young children probably make all the adaptations that are expected of them through their pleasure in contact and their urge to play and learn with their teachers and with objects in the environment. Play provides a counterweight to all the adaptations expected of young children. It is therefore important with the youngest children to look not only at their pure and free play but also at their play and playful interactions during the time adults are caring for them and fulfilling other obligations of normal life.

Play and learning boundaries

From the perspective of young children there are no clear boundaries between play, care, and work. During feeding or washing or diaper changing they can suddenly stop and demand the caregiver's attention by laughing or making play noises (Shin, 2010). Toddlers play while eating and drinking in the day-care center. They look excitedly at the drops of lemonade dripping from the table, smear yoghurt on the table with their fingers, blow bubbles in their cup, poke their fingers in the bread, lick the peanut butter from it. They copy each other and together take pleasure in their discoveries. But activities that look like play can also be serious for a child. Helping other children is a serious business — for instance, helping each other with practical matters like putting on their coats or shoes.

> Jarno (2 years old) and Emmie (2 years old) play together in the corner. All at once Jarno sees his rubber boots and decides to put them on. He puts his foot in one boot but gets no further than the shaft. Then he asks Emmie to "hellup, hellup" and pushes a boot into her hands. Emmie offers the left boot to the right foot. After much pulling and tugging, after a while, Jarno walks about with his feet in the shafts of the wrong boots. For the adults watching this scene it is all most amusing, but is it play? No, that's probably not how the children see it. (Observation by ES)

Playing and working can pass easily from one to the other.

> Sylvia (2 years old) squats on the floor with a brush and dustpan and makes as though she is brushing the floor. In fact her brush hardly touches the floor, and she does not seem bothered by whether there is anything to sweep or not. Then, when the teacher asks, "Sylvia, will you help me with sweeping?" Sylvia immediately sets to work. She carefully brushes from the floor the crumbs that the teacher points out. (Observation by ES)

The younger the child the less he or she is aware of the boundaries between play and the necessities of ordinary life. It is therefore up to parents and teachers to guard the boundaries for the children's safety and well-being. In practice, with toddlers this means many confrontations with "no," "mustn't do this," and "don't do that." Cannella (1997) found that during her observation study in day-care centers that children got to hear more than 60 different rules and commands from their teachers. During free play teachers are more often busy controlling the children's behavior than with talking or playing with them (Singer & De Haan, 2007b; Singer, Nederend, Penninx, Tajik, & Boom, 2014). Brennan (2005) and Stephenson (2009) produced similar findings. When teachers make use of play or elements of play in controlling behavior, their actions appear to have a positive effect on the children. Corsaro (2010) describes how rituals help preschool children reconcile themselves to the inevitable. For example, they can be made aware of the times dictated by the adult structuring of the day: taking leave of their parents, sitting at the table for lunch, the beginning and end of the day. Ritual provides the structure for a play-world in which the participants have a certain influence that is experienced as free activity and that can reconcile them to an accomplished fact.

In their studies in child centers in New Zealand, Brennan (2005) and Stephenson (2009) give examples of teachers who soothe through play and humor.

> Nicola is roaming around the room although she has been asked by Donna (teacher) twice to remain seated until she has finished her lunch. Nicola ignores both requests and heads in the direction of the kitchen. Donna asks her once again to sit down but this time with smiles and says: "Nicola you have a carrot, a big juicy carrot. You will be the envy of all the rabbits in the world." Nicola grins and sits down at the table. (Brennan, 2005, p. 116)

In this example the teacher employs the magic of the pretend game in order to create together a reality that both teacher and child can share in freedom. Young children also love to play with the rules of their caregivers by transgressing them for fun (Corsaro, 2010; Singer & De Haan, 2007b). For example, children may clap loudly and scream, look to see whether the teacher has seen, and then laugh even louder if the teacher has not noticed; or children may secretly go outside, which is forbidden, and look to find out whether the teacher has seen. These studies suggest that 2- and 3-year-olds all playfully explore the boundaries of their world — the boundaries their parents have drawn. Through humor, rituals, and a playful approach caretakers or teachers and young children bridge the great difference in power that exists between them.

From an ethical point of view young children's natural impulses to play are related to the issue of children's rights and to the issue of power in the teacher-child relationship. Children have the right to play, while the task of the teachers is to set the boundaries so the children can play safely and are well taken care of. But the way the teacher sets boundaries and the way the teacher structures young children's lives should not be to the detriment of children's playfulness — that is, their creativity and sense of freedom. Children and teacher create togetherness in playful communication; with the help of humor and playfulness the teacher ensures that the child is not overpowered.

Children and teachers: play and playfulness

Teachers should ensure that the vast array of young children's confrontations with such constraints as rules, limits, experiences of failure while learning new skills, and caretaking activities are handled in a playful spirit. Play helps young children to overcome the troubles of ordinary life and to share meaningful experiences with caregivers, teachers, parents, and peers. As Trevarthen (2011) writes: "As they play and make sense together, a baby and parent learn to act their part in a set of performances and mannerisms that grow as the beginnings of a cultural way of life or 'habitus'" (p. 180). Teachers and young children who co-construct a play-reality are building a strong sense of togetherness through rituals that start the day, rituals that celebrate birthdays, or rituals that are incidentally developed by the children. Through rituals share as through drama, storytelling, and pretend play, pedagogues and children create a magic circle. Huizinga (1938/1955) reminds us of the essential value of play: children and animals "play because they enjoy playing, and therein precisely lies their freedom" (p. 8).

What counts is the spirit of playfulness that permeates all aspects of young children's lives. Play is fundamental to living and adapting to the demands of ordinary life. If we are not to lose the creativity needed to overcome differences in power and to take pleasure in the co-construction of meaning and the modulation of subjective experience, we must cherish the endowment that nature has given to us: the capacity to play.

In conclusion, play and playfulness are basic aspects of early childhood education. The younger the child, the more important it is that play permeate every aspect of his or her life. A play pedagogy means that teachers provide support for young children to play in a safe and challenging environment that is adapted to their needs and interests and also that teachers support peer play and peer relationships from an early age. A play pedagogy in addition involves teachers' knowing that playfulness and the co-construction of meaning with infants and toddlers go hand in hand. Structuring and limit setting by the teacher and the adaptation of young children to the teacher's demands should take place in a spirit of playfulness. Ritualized interactions or patterns of behavior help the child to anticipate, to take the initiative, and to invent variations; they support the child's agency. Above all, in a play pedagogy teachers are aware that young children live in a world that can easily overpower them. They have much to learn, and they have to adapt to the cultural world into which they are born. Play helps children to maintain their confidence and not to give up after failure. In a play pedagogy, teachers gently structure young children's lives by means of routines, rituals, songs, dance, rhythms, rhymes, and humor.

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Styles of parent-child interactions in families with preschool-age children

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With regard to cultural-historical and activity approaches, collaborative activity with an adult, including communication as a type of meta-activity, is considered to be the necessary mechanism of child development. A child is considered to be an active partner, possessing his/her own motives, and is guided by mental representations of the parent and interactions with him/her. Russian psychologists have developed a range of parenting style classifications; however, these styles primarily emphasize a parent's position, contrary to methodological perspectives, with inadequate consideration of a child's own agency. The aims of the current research were to investigate actual goal-oriented interactions between preschoolers and their parents and to outline certain patterns (types) of interactions, considering both partners and analyzing interactions according to the activity model. A total of 75 parent-child dyads (children aged from 4.6 years to 6.11 years) participated in "collaborative activity trials" in which the observational method was based on the activity approach. Cluster analysis (k-means clusterization) revealed five different groups of parent-child dyads: conflictual, harmonious, distant and two-fold dominant (with dominant parent or dominant child). Between-group comparisons (Mann-Whitney U test) showed significant differences in a range of parameters of activity and emotional components of interactions. The harmonious type of interactions is not prevalent, although subgroups with different types of domination are the most common, which may be attributed to cultural peculiarities. Domination-subordination misbalance does not seem to seriously distort the normal developmental trajectory; however, in cases of conflictual and distant dyads, interactional issues might hinder the course of goal-oriented activity, which might serve as a predictor for potential difficulties in further learning.

Keywords: parent-child interactions, parenting styles, collaborative activity, parental scaffolding, preschoolers

Introduction

Numerous studies have demonstrated the relationship of mental, social, emotional, and personal behavioral development to particular qualities of parent-child interactions. Relevant to cultural-historical and activity approaches, collaborative activity with an adult, including communication as a type of meta-activity (Burmenskaya, 1997), is considered to be the necessary *source* of child development (Vygotsky, 1934/1998) because an adult possesses "ideal forms" of cultural and psychological tools that are interiorized by a child (Vygotsky, 1934/1998). According to Vygotsky's theory, communication together with the morpho-physiological features of the brain constitute the *conditions* of development (in contrast to heredity and environment, as reported in the traditional studies of Western psychology) (Obukhova, 2013, p. 52).

At the early stages of that research paradigm, adults were regarded primarily as intermediaries between child and culture, not as people bonded to children with emotional and personal relationships (Rodina, 2012). Neo-Vygotskian researchers, such as Maya Lisina and Daniil Elkonin, further developed the concepts of *communication* and *leading activity* from motivational, emotional and personal perspectives (Karpov, 2005).

During preschool age, one of the leading types of activity is role-play in which a preschooler understands the meanings and motives of the "adult" social world. His/her emotions displayed in the logics of the — play plot (e.g., pretending to suffer from pain) may strikingly differ from the actual emotions experienced (e.g., experiencing pleasure from having fun playing hospital) (Elkonin, 1989) that require differentiation of motives and goals in the activity structure.

A child is not just an adult's apprentice: he/she participates in an activity basing on his/her own motives. Lisina (1982) outlined the following groups of motives of communication: 1) cognitive or epistemological motives; 2) object-centered or practical motives in which the adults are partners in collaboration, assistants and models for correct action; and 3) interpersonal motives.

The goal of communication is regulating activity and achieving results, except for immediate interactions in the course of situational-personal communication, the first type of activity to be developed in the ontogeny (Lisina, 1982). The dominance of practical motives in communication at several stages of development does not exclude emotional and personal motives (Burmenskaya, 1997). Preschoolers develop non-situational cognitive (typically, at the ages of 3–5 years) and non-situational personal types (at the ages of 5–7 years) of communication. Non-situational cognitive communication is aimed at gaining information concerning the surrounding world, which is manifested in the form of numerous questions to an adult. Non-situational personal communication occurs when a child "discovers" the inner life of other people and becomes interested in their feelings and attitudes (compared to the "theory of mind" development). Lisina (1982) also outlined leading communication needs at different developmental stages: particularly, preschoolers experience a need for respect (ages, 3–5 years) and understanding (ages, 5–7 years). Thus, even play and object-oriented activities, such as drawing or solving puzzles, are enriched with a range of (inter)personal motives for a child, when an adult is engaged.

A child can have different motives of communication and can aim his/her actions at different objects in collaborative activity. The concept of "object of activity" in Leontyev's theory is not restricted to material objects but refers also to the "facts of mind" (Stetsenko, 2005), such as representations of personality traits of a communication partner or his/her mental image.

Lisina emphasizes that interpersonal relationships are *products* of communication activity (according to Leontiev's psychological structure of activity) (Lisina, 1982). Activity partners also develop mental representations (*obraz*) of each other and their interactions. The parent-child activity is largely mediated and guided by a child's internalized representations (*obraz*) of the parent and relationships with him/her (Leontyev, 1981). Thus, the interaction process is characterized by pronounced reciprocity, as highlighted in a systemic approach to family functioning (Varga, 2011). The significant role of internalized partner's qualities for communication motives is similar to G.H. Mead's concept of "the generalized other," showing consistent findings in cultural-historical and Western social constructionist approaches (Vari-Szilagyi, 1991).

Another important contribution of cultural-historical and activity theory in the investigation of child-parent interactions is the concept of social situation of development: "a completely original, exclusive, single, and unique relation, specific to the given age, between the child and reality, mainly the social reality" (Vygotsky, 1998, p. 198). This concept allows child-parent interactions holistically and avoids breaking it down into multiple factors. The factor analysis via specific behavioral coding of child-parent interactions is widely used in early intervention and child welfare practice and has proven its efficiency for the applied purpose. However, it does not provide a solid base for overall theory and classification. For example, Power's (2013) review of 3000 studies on preschooler-parent interactions published between 1985 and 2010 revealed a wide range (6 to 28) in the quantity of behavioral factors analyzed. Three similar factors were identified throughout the majority of studies: 1) directive parental control; 2) autonomy-promoting forms of control; and 3) positive emotional involvement with the child. It presumes the existence of global dimensions of parenting and core patterns of child-parent interactions, consistent with the cultural-historical approach.

In the 1960s, Baumrind (1967) identified three common styles of parenting behavior, with one style added later by Maccoby and Martin (1983), as well as corresponding patterns of children's behavior (Table 1). The works by Baumrind became well-known in Russia, essentially through secondary sources, and continue to have much influence in the field of applied research. Baumrind's work turned out to be compatible with Russian research because of its holistic (person-centered or, speaking about interactions, case-centered) nature and the focus on children's own activity in response to different parenting behaviors.

The parenting styles identified by Baumrind and elaborated by Maccoby and Martin remain the only parenting styles with a strong empirical basis, relevant for Western cultures (Power, 2013).

Returning to the concept of social situation of development, we emphasize that it provides even more opportunities for understanding a child's psychologi-

Table 1. Parenting styles and children's associated behavioral patterns (according to Baumrind, 1967, and Maccoby and Martin, 1983)

Parenting style	A child's associated behavioral patterns
1. Authoritative style (high levels of both responsiveness and demandingness)	Assertive, self-reliant
2. Authoritarian style (low responsiveness and high demandingness)	Discontented, withdrawn
3. Permissive style (high responsiveness and low demandingness)	Low self-control and low self-reliance
4. Uninvolved style (low levels of both responsiveness and demandingness)	Poor self-control, low self-esteem, and aggression

cal processes than systemic/contextual and socio-interactional approaches because the structure of the social situation of development consists of objective and subjective child's positions. The objective position refers to "the system of socio-cultural expectations and requirements"; the subjective position is "the system of oriented images[1] which defines interaction and cooperation between a child and an adult" (Karabanova, 2012, p. 150). The subjective component is shared by the participants of communication and interaction (Karabanova, 2012, p. 150). From this perspective, the analysis is not limited to a child's observed activity; it is extended to his/her system of mental representations and emotional experiences.

Russian psychologists have also developed a range of parenting style classifications (Spivakovskaya, 1981; Varga, 1986; Eidemiller & Yustitskis, 1999). However, they primarily emphasize a parent's position, contrary to the methodological perspectives, with insufficient consideration to a child's own agency (Shvedovskaya, 2006). It may be, in part, explained by a predominant interest in the field of education, where Soviet and Russian research of children's activity are more voluminous and scrupulous. The studies of infant- and toddler-adult interactions were conducted primarily in orphanages to trace the trajectories of development under normal and deprivational conditions. Additionally, the review of diagnostic tools for the investigation of child-parent interactions in preschool aged children, for example, when a child cannot give reflective verbal accounts of his/her perceptions and attitudes, demonstrates their scarcity (Shvedovskaya, 2003). There are several recent developments, for example, integrating activity research with family systemic approach (Shvedovskaya, Zagvozdkina & Yu, 2014); however, activity-based typology of parent-child interactions is still an underinvestigated topic.

The aims of the current research were to investigate actual goal-oriented interactions between preschoolers and their parents and outline certain patterns (types) of such interactions, considering both partners and analyzing their interactions according to the activity model.

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[1]   *Obraz*, in this article, is translated as "mental representation."

Method

Child-parent dyads attending 6 public preschool facilities in Moscow were randomly assigned for participation in the research. The sample included 150 participants, i.e., 75 parents (all –mothers) and 75 children ranging in age from 4.6 years to 6.11 years.

The investigation of actual interactions in parent-child dyads was performed using the "collaborative activity trials" (Burmenskaya, Zakharova, Karabanova, Lebedeva & Liders, 2007). This observational method allows us to evaluate several parameters of interactions. The core difference between the "collaborative activity trials" method and behavioral coding is in the specific organization of the collaborative activity.

During the "collaborative activity trials," a parent-child dyad is provided with the task of making up a figure of play-dough, mosaic or building blocks according to a given sample. In other words, the *goal* and the *conditions* of the activity are set by a researcher. During the interactions, one can observe *actions* and *operations* (e.g., control, giving directions) as well as emotional reactions, which can give insight into the *motives* of interactions and (dis)satisfaction of the underlying *needs* and *mental representations* of the partners. Thus, the design of the trials reflects the classic Leontyev's (1981) scheme of activity structure.

To facilitate collaboration and highlight the typical role distribution in a parent-child dyad, the task has the following amplification. The specimen of the required handcraft product is given only to one of the participants, so the other participant has to act under the partner's guidance. The person who has the specimen is responsible for explaining the actions that are necessary to obtain the correct figure but cannot describe the final results (e.g., comments "You should make a car" or "It looks like a letter «Z»" do not comply with the rules). Roles of "the guide" and "the guided" are distributed between a parent and a child according to their own preferences, which also provides meaningful information regarding their relationships.

The list of parameters for the analysis of collaborative activity in parent-child dyads includes cognitive and emotional components of interactions.

The activity components of interaction include the following parameters (for examples of rubrics, refer to Table 2):

1. Peculiarities of distribution of the roles of a "leader" and a "subordinate";
2. Reasonability and coherence of requirements imposed on a partner;
3. Efficiency of activity regulation, considering how complete and elaborate the requirements are; if the reference points for action fulfillment are outlined adequately; how comprehensible the notions used are to the child; if a partner's demands and instructions are perceived as a direct guidance for action; if the individual and age (developmental) peculiarities of a partner are considered;
4. Extent of coherence of the interactional partners' actions;
5. Dominating forms of control in task-oriented collaboration of a child and a parent: if the control is essential or formal; if the separated stages and final results are subject to control;

6. Peculiarities of the partners' attitudes towards success/failure; character of self and a partner's activity assessment as well as evaluation of general results of the activity; and

7. The subordinate partner's readiness to accept the guidance; adequate reaction to the partner's remarks; eagerness to achieve positive results in the course of interaction.

Table 2. Example of rubrics for evaluation of the activity components of child-parent interactions

Peculiarities of the partners' attitudes towards success/failure; character of self and a partner's activity assessment as well as evaluation of general results of the activity.

Positive manifestations	**Negative manifestations**
• Positive assessment of the subordinate partner's actions; • Positive assessment of one's own leadership; • Adequate assessment of the activity results.	• Negative assessment of the subordinate partner's actions; • Negative assessment of one's own leadership; • Preliminary assessment — warning; • Assessment of a partner's personality, stigmatization; • Inadequate assessment of the activity results.

Efficiency of activity regulation, considering how complete and elaborate the requirements are; how adequately the reference points for action fulfillment are outlined; how comprehensible the notions used are to the child; if a partner's demands and instructions are perceived as a direct guidance for action; if the individual and age (developmental) peculiarities of a partner are considered.

Positive manifestations	**Negative manifestations**
• Desired actions are marked by certain reference points; • Notions and terms used are comprehensible by a partner; • Statements are completed and elaborated; • Directions are given in a positive manner (how one should act to achieve success); • Directions refer to the next sequential step.	• Directions do not correspond with the contents of the activity; • Notions and terms are used without considering age (developmental) abilities of a partner, overestimating or underestimating them; • Statements are fragmental and desultory; • Directions are formulated based on negative aspects (how one should not act); • Directions refer to future results, not connected to the current activity.

The emotional components of interaction include the following parameters (for examples of rubrics, refer to Table 3):

1. The partners' eagerness to continue interactions, their commitment to collaboration, sharing responsibility in the course of task fulfillment, interest in a partner;

2. Peculiarity of distance setting in the course of interactions with a partner, inclination to or avoidance of close contacts;

3. Peculiarities of emotional acceptance of a partner, recognition and respect of his rights to individuality, empathy in situations of success and support in difficult moments;

4. Aspiration to protect a partner from negative emotional experiences, to level or to share the responsibility of a failure; and

5. Character of the partners' emotional reactions to significant situations as the indicators for feelings and emotional experiences of the interaction participants.

Table 3. Example of rubrics for evaluation of the emotional components of child-parent interactions

The partners' eagerness to continue interactions, their commitment to collaboration, sharing responsibility in the course of task fulfillment, and interest in a partner.

Positive manifestations	Negative manifestations
• Promotion of a partner's actions (a question, an advice, a comment of recognition); • Support and respect of a partner's initiative; • Shared responsibility, use of the "we" pronoun; • Maintaining contact (eye-sight, touch, scaffolding questions).	• A partner's passivity becomes the reason for ceasing interaction; • Ignoring a partner's initiative; • Responsibility of failure imposed on a partner; • Responsibility of failure imposed on oneself; • Lack of attempts to maintain contacts with a partner.

Aspiration to protect a partner from negative emotional experiences, to level or to share the responsibility of a failure.

Positive manifestations	Negative manifestations
• Understanding of a partner's actual difficulties, obstacles in the interactions; • Consolation of a partner, devaluation of the failure; • Aspiration to justify a partner in the situation of failure, emphasize his/her virtues.	• Making a partner responsible for the failure; • Blaming a partner, laughing at him/her or giving him/her "a diagnosis"; • Emphasizing failures, criticism and condemnation of a partner's actions.

K-means clusterization was used to divide parent-child dyads into groups; Mann-Whitney U test was used to explore between-group differences considering certain interactional parameters.

Results

Clusterization. Implementation of the cluster analysis of the results of the collaborative activity trials using the k-means clusterization method revealed five different groups ($p < 0.05$) of parent-child dyads that vary in the interactional parameters:

1) conflictual;
2) harmonious;
3) distant; 4)
"dominant parent — subordinate child" and
5) dominant child — indulgent parent".

Table 4. Distribution of parent-child dyads according to the five types of interactions

№	Type	Number of dyads (people)	Number of participants in the group (%)
1.	Conflictual	4 (8 people)	5.3
2.	Harmonious	15 (30 people)	20.0
3.	Distant	4 (8 people)	5.3
4.	Dominant parent — subordinate child	30 (60 people)	40.0
5.	Dominant child — indulgent parent	22 (44 people)	29.3
	Total	**75 (150** people)	**100**

Table 4 represents the distribution of parent-child dyads according to those types.

The most voluminous group in the sample — *dominant parent — subordinate child* — includes 30 dyads, followed by *dominant child — indulgent parent* and *harmonious* groups. *Conflictual* and *distant* groups are limited to 4 dyads each.

Between-group comparison. Between-group comparison using the Mann-Whitney U test showed that the discovered groups significantly differed ($p < 0.05$) in certain parameters of activity and emotional components of interactions.

The results obtained allowed us to evaluate the core parameters, explaining the differences between the five groups:

- Activity aspect of interactions according to the character of role distribution (leadership, coherence of guidance, peculiarities of assuming control) and the character of realization of task-oriented collaboration (providing instructions, orientation towards a partner's activity, peculiarities of control and assessment); and
- Emotional aspect of interactions according to the character of emotional vector of interactions (aspiration for collaboration, distance with a partner, emotional acceptance/rejection of a partner) and emotional reaction to success or failure (relationships of protection or blame, emotional manifestations).

Notably, the activity (and, in some sense, emotional) aspect of the investigated interactions may be described as scaffolding, i.e., the support given to a younger learner by an older, more experienced adult while acting in the zone of proximal development (Wood, Bruner & Ross, 1978).

Table 5. Between-group comparison of interactional parameters in different types of dyads

Dyads	Dyads			
	Harmonious	**Distant**	**Dominant parent**	**Dominant child**
Conflictual	All parameters (p = 0.000).	All parameters related to child (from p = 0.008 to p = 0.04). Parameters related to parent: role distribution (3 parameters); goal-oriented activity (4); emotional interactions (1); emotional assessment of results (1); p = from 0.008 to 0.040).	All parameters related to child (p = 0.000). Parameters related to parent: role distribution (3 parameters); goal-oriented activity (8); emotional interactions (8); emotional assessment of results (4); p = from 0.000 to 0.013).	Parameters related to child: role distribution (3 parameters); goal-oriented activity (7); emotional interactions (3); emotional assessment of results (2); p = from 0.000 to 0.055). Parameters related to parent: role distribution (8 parameters); goal-oriented activity (7); emotional interactions (9); emotional assessment of results (5); p = from 0.000 to 0.055).
Harmonious		All parameters related to child did not reveal significant differences. All parameters related to parent (p = 0.000).	All parameters related to child did not reveal significant differences. All parameters related to parent (p = 0.000).	All parameters (p = 0.000)
Distant			All parameters related to the child did not reveal significant differences. Parameters related to parent: role distribution (5 parameters); goal-oriented activity (6); emotional interactions (11); emotional assessment of results (4); p = from 0.000 to 0.053).	All parameters related to child (from p=0.000 to p=0.001). Parameters related to parent: role distribution (8 parameters); goal-oriented activity (4); emotional interactions (11); emotional assessment of results (5); p = from 0.000 to 0.055).
Dominant parent				All parameters related to child (p = 0.000). Parameters related to parent: role distribution (2 parameters); goal-oriented activity (3); emotional interactions (1); emotional assessment of results (1); p = from 0.000 to 0.028).

Table 6. Peculiarities of parent's and child's positions in interactions

№	Parameters of interactions	Peculiarities of position in interactions		Character of interactions
		Parent	Child	
1.	Conflictual type of interactions	Authoritarianism, domination	Egocentrism, activeness	"WE" — incoherence
2.	Harmonious type of interactions	Democracy, acceptance	Acceptance	Complimentary "WE"
3.	Distant type of interactions	Distance, coldness	Acceptance	Interactions "side by side" (but not "together")
4.	Dominant type of interaction: dominant parent	Authoritarianism	Acceptance	Dictate — subordination
5.	Dominant type of interaction: dominant child	Indulgence	Egocentrism, activeness	Dictate — subordination

Another important result is the likelihood of giving a qualitative picture of the characteristics of the outlined types of interactions. First, we summarized the positions of parents and children in the interactions.

There are neither completely identical nor similar parent's positions within the groups.

Second, based on the criteria of correlation of activity-oriented and emotional interaction components in the child and in the parent, we have developed and described the empirical typology of relationships in parent-child dyad.

Conflictual type of relationships

Roles. In a conflictual dyad, the active struggle for leadership in interactions is maintained. A child tries to defend his/her priority, when leadership and subordination are concerned. A conflictual parent becomes active in response to his/her child's initiative; however, if a situation actually requires assuming a subordinate position, a conflictual parent is inclined to avoid interactions or respond negatively to his/her child's requests and directions.

Scaffolding. The interactions in a conflictual dyad are characterized by a prominent strain. A child intervenes actively in a parent's activities and destabilizes a parent's capacity to plan his/her actions. A parent's guidance of a child's actions consists of fragmental commands. A parent is *a priori* sure that a child understands his/her demands and instructions. A child uses the same model of providing instructions: attempts to perform some action on his/her own, without explaining or demonstrating to the parent what the parent should do. A conflictual parent's support is untimely: (s)he primarily controls the final results of a child's actions without step-by-step control and prefers to use criticism, laugh and give "diagnosis." This type of action does not allow a child to correct his/her own actions efficiently, so the child prefers to ignore the adult's remarks and initiatives. The child demon-

strates a wide range of protest behaviors against his/her parent's guidance: formally executing directions, disputing, refusing to fulfill the demands and demonstrating negative attitudes towards adults.

Results. In an actual situation of activity failure, both parent and child negatively assess the partner's actions. A parent is inclined to shift responsibility for failure to a child. (S)he also uses such types of assessment as stigmatization and preliminary assessment.

Emotions. Both interactional partners tend to ignore each other's emotional states. Because of internal strain, they are not eager to initiate and maintain contact and passively respond to a partner's passivity. A parent claims the loss of contact with his/her child. In the emotional aspect, a parent often displays irritability, malevolence, coldness towards a child, as well as avoids bodily contact. A child displays reciprocal irritability.

Harmonious type of interactions

Roles. Harmonious interactions are peculiar with mutual understanding and coordination of positions in a child-parent dyad. Role distribution is complimentary and is adjusted to the contents of the activity. When a parent leads, a child accepts his/her guidance without struggle. Conversely, a child's initiative is accepted by a parent.

Scaffolding. A parent's guidance is coherent; the requirements are adjusted to a child's level of comprehension. A parent is inclined to support a child in difficult situations but does not try to replace a child in his/her own activity. Control is targeted at the contents of the activity. A parent considers the child's developmental and individual peculiarities while maintaining object-oriented collaboration.

Results. Both partners adequately assess the results of their activity. A parent does not blame the child for failures, trying to solve problems in a constructive manner and demonstrating the value of the child. A parent's and a child's emotional manifestations are adequate for situations of success or failure.

Emotions. Both partners want to maintain contact, including bodily one. A parent uses the "we" pronoun for comments and calls the child by his/her name. Both a parent and a child demonstrate emotional acceptance and warmth.

Distant type of interactions

Roles. A distant parent prefers to lead the interactions because it is a simple way to make the child achieve the parent's own goals. A child accepts this situation and does not actively struggle for leadership.

Scaffolding. A distant parent tends to overestimate a child's abilities. (S)he is not oriented to a child's actions and ignores his/her emotional states. In case a child cannot complete the task, it is easier for a parent to do it him/herself rather than explain anything or provide support. A parent does not pay attention to interim results during the process of controlling the child's actions. A child can conclude his/her course of actions to be right or wrong only after demonstrating the final

result, which prevents the child from timely and efficient correction of his/her own actions. In cases that require the child's leadership in interactions, a parent acts formally. (S)he easily refuses to follow the child's guidance and ignores his/her remarks. A child's initiative and assertiveness cause emotional discomfort in a parent. However, compared to the conflictual type of interactions, the distant type does not maintain any pronounced strain in interactions. If a child ceases his/her activity, a parent withdraws from interactions and does not attempt to revoke the child's activity.

Results. A parent is inclined to assess a child's actions negatively and put the responsibility for failures on him/her. Situations of failure result in emphasizing failures, criticism, arrogance, humiliation of the child's personality, and, at the same time, relative unimportance of success. For a parent, failure is a significantly discomforting event, whereas success is expected by default.

Emotions. Compared to other types of relationships, this type is less beneficial in its emotional aspect. Bodily contact is avoided in the parent-child dyad. A parent lacks empathy and displays emotional coldness.

Dominant parent — subordinate child

Roles. A dominant parent actively takes on the leading position regardless of whether (s)he should be a leader or a subordinate in the situational context. (S)he tends to overestimate a child's abilities and demonstrates lack of empathy. There is no pronounced struggle or conflict in the interactions: the role distribution is accepted by both interacting participants.

Scaffolding. A dominant parent is incoherent in his/her guidance. A parent tries to support the interactions and motivate the child but uses non-constructive means, e.g., comments regarding the loss of contact, thus aggravating a child's distraction. A parent positively assesses the child's personality positively and adjusts his/her actions to the child's current state.

Results. Assessment of the child's actions is adequately based on the results of those actions.

Emotions. There are no pronounced negative emotional manifestations in this type of dyadic interactions; however, the child feels anxiety in situations of failure.

Dominant child — indulgent parent

Roles. A child's position is similar to that in the conflictual type of interactions. A child is egocentric and active but is not trying to struggle for leadership, and the level of conflict in the dyadic interactions is minimal.

Scaffolding. Anindulgent parent is coherent in guidance; (s)he adjusts his/her action to the child's conditions. Instructions adequately correspond to the contents of the activity; the instructions employ notions, comprehensible for the child, although they refer to delayed results. A parent is inclined to discuss the ways of action with a child. Generally, a parent aims at achieving positive results in interactions but does not try to intervene in a child's activity and maintain step-by-step

control, thus providing him/her with the opportunity to take the initiative. An indulgent parent can support the child, replacing a child's activity in complicated situations. There is no pronounced negativism or challenge of requirements from the child's perspective. Both interacting partners positively assess each other's actions.

Results. A parent's emotional reactions to success or failure are adequate; there is no emotional coldness, malevolence, or underestimation of success. In case of failure, an indulgent parent is inclined to accept full responsibility for the failure.

Emotions. When hindrances occur during the activity, both partners continue to maintain contact. A parent is in close proximity to the child and uses bodily contact. A child demonstrates formal obedience to instructions; maintains emotional distance from the parent and expresses anxiety in case of failure or when corrective remarks are made.

Discussion

Empirical research has revealed five types of child-parent interaction, including conflictual, harmonious, distant and dominant (divided into "dominant parent — subordinate child" and "dominant child – indulgent parent" subgroups), which differ both in activity (role distribution, character of realization of task-oriented collaboration) and emotional (emotional vector of interactions, emotional reaction to success or failure) aspects of interactions.

The obtained differences in scaffolding practices in our research are more elaborate than the differences in emotional manifestations, which can be generally described with the continuum of rejection — indifference — acceptance. Using the activity approach as the theoretical framework for research in parent-child interactions can capture the wealth of real-life interactions and their patterns. The notion of scaffolding includes *structure* and several aspects of *control*, which, in addition to *warmth*, constitute the three empirically based parenting dimensions (Power, 2013).

Notably, the harmonious type of interactions is not prevalent, whereas subgroups with different types of domination are the most common types of interactions. It cannot be interpreted as a sign of general poor well-being in the sample of Russian families with preschoolers. The prevalence of power misbalances in parent-child dyads may be attributed to cultural peculiarities, e.g., weak psychological borders between family members (Varga, 2011).

There is not much reliable evidence regarding cultural peculiarities of Russian families. For example, the notion of attachment styles (Ainsworth, Blehar, Waters & Wall, 1978) can be roughly related to the emotional aspect of interactions and "working models," i.e., mental representations of relationships with parents (Bowlby, 1973). The large-scale research of attachment styles in Moscow preschoolers, conducted in 2000–2005, revealed the picture of 30 % of children with secure attachment, 20 % with anxious-avoidant attachment and 50 % with ambivalent attachment (Avdeeva, 2006). Children have emotional connections with their par-

ents; however, they likely do not perceive their family situation as coherent and stable (e.g., a "dominant" child might feel unsafe due to the lack of hierarchy and a "subordinate" child, on the contrary, might feel unsafe due to a parent's intrusive leadership).

Domination-subordination misbalance seems to not seriously distort the normal developmental trajectory. For example, Saxena (2010) described two types of educational scaffolding: "supportive scaffolding" with "initiation-response-follow-up" pattern and "directive scaffolding" with "initiation-response-evaluation" pattern. These two scaffolding types differ not only in structural organization but also in an adult's assumptions regarding the nature of communication situations; "directive scaffolding" still allows a child to proceed in the zone of proximal development. However, in cases of conflictual and distant dyads, interactional issues hinder the course of goal-oriented activity, which might serve as a predictor for potential difficulties in future learning activities.

Our study has several limitations. First, our study was conducted in laboratory settings and conditions involving children's and parents' interactions, while there was evidence that children's and parents' everyday experience with interactions and, specifically, scaffolding may be significantly more diverse (Gauvian, 2005). Second, peculiarities of collaborative activity change rapidly, and there is a need to consider developmental dynamics. For example, while mothers of preschoolers concentrate on establishing joint understanding of the task, mothers of first-graders employ more sophisticated solution strategies, such as visualization of an activity plan (Gauvian, 1992). Furthermore, to explore the social situation of development as the entire range of a child's social interactions and connections, additional research should involve both parents and peers (siblings and friends) and consider models of a wide range of collaborative activities.

Acknowledgments

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Shared activities of parents and their preschool children during family pastime

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This article studies the structure of the pastime of contemporary preschool children and the importance and prevalence of various kinds of activities that parents and their children share. The emphasis is on those features of parental behavior that are determined by gender role (mother/father), family status (two-parent/separated family), style of parent-child relationship, and also child's gender. The work is based on data from 1,936 questionnaires received from parents of preschool children (from 1.5 to 7 years old) who were attending Moscow kindergartens. The research was carried out in 41 kindergartens in 9 districts of Moscow. The survey uncovered several social-psychological features of the position parents take while organizing their shared pastime with preschool children: the influence of traditional gender-role models of parental behavior; the "complementary" principle of mother's and father's social-role positions in the upbringing of a daughter; the distortion of traditional maternal behavior in the upbringing of a son in a separated family; the reduced organization of shared play with a child in a separated family; the influence of the style of the parent-child relationship on the participation of parents in their children's activities. The dynamics show how the parents' position changes as their children grow older (from 1.5 years to 7 years): namely, the decrease of parents' organization of and participation in a preschool child's activities has a negative impact on their emotional state while interacting with the child.

Keywords: preschool childhood, family pastime, shared activity of parents and children, parental position, parent-child relationship

Introduction

How a preschool child's pastime is organized is extremely important for the formation of the child's personality and for the development of the child's potential for successful socialization in the future. Parents' pedagogical attitude toward education and upbringing affects how they organize their children's pastime. Despite the importance of this endeavor, however, special sociological, pedagogical, and psychological research in this area is rather scarce (Antonova, Volkova, & Mishi-

na, 1998; Azarov, 1985; Bocharova, 2003; Bocharova & Tihonova, 2001; Bolotova, 2001; Doronova, Solov'eva, Zhichkina, Musienko, 2001; Krulekht, 2001; Smirnova, 2006; Sozinova, 2004; Tubel'skaya, 1999; Vershinin, 1998; Vinogradova & Kulikova, 1993; Zatsepina, 2005; and others).

Matters of pastime organization at home are discussed in several contexts. The first is related to the connection between home and kindergarten upbringing (as a rule, parents acknowledge the kindergarten's educational plan while interacting with the child, and parents provide additional education, such as hobby groups). The second context is connected to supporting a child's health and physical development (walks, sports classes, for example). The third context is related to various kinds of esthetic activities and the introduction of children to the arts (reading, drawing, listening to music, modeling, for example). The fourth context is in regard to the use of play activities by parents as an important tool in a child's psychological and social development (how play is organized, whether parents take part in it, and so on). And, finally, a special context is the activities shared between parents and children (involving the child in housework, in the care of pets, in grown-ups' activities, for example).

An important aspect of pastime in preschool childhood is children's cultural development, their "growing through the culture." Through culture children are introduced to sociocultural values and norms, integrated into society, and helped to assimilate social experience and to form national and cultural identity (Bahtin, 1979; Bibler, 1991; Lihachev, 2001; Shpet, 1996; Vygotsky, 1999; and others). Children's growing through the culture occurs through the assimilation of the cultural and historical experience of their family and their nation. According to the cultural-historical concept of L. S. Vygotsky, the cultural becomes the individual through intermediary activity: grown-ups transmit cultural tools to children (Zinchenko, 1996). The child is introduced to culture through daily family life, traditions, national folklore (fairy tales, sayings, riddles), holidays, arts (literature, music, fine arts), and play (Azarov, 1985; Lesgaft, 1991; Mudrik, 1997; Simonovich & Simonovich, 1874; Vodovozova, 2012; and others).

This article studies the structure of contemporary preschool children's pastime and the importance and popularity of various activities shared by parents and children. The emphasis is on those specific features of parental behavior that are determined by gender role (mother/father), family status (two-parent/separated family), style specifics of parent-child relationships, and child's gender. The article follows a series of articles dealing with the sociology of preschool childhood (Sobkin & Skobeltsina, 2011, 2014; Sobkin, Skobeltsina, & Ivanova, 2013; Sobkin, Skobeltsina, Ivanova, & Veryasova, 2013; and others).

Methods

The research method used was paper questionnaires, which allowed us to detect the qualitative and quantitative parameters of the social and psychological features of the parents' position in organizing children's pastime. We used the questionnaire for parents of preschool children developed by the Institute for the Sociology of Education (led by V. S. Sobkin). The gathered data were analyzed using methods of mathematical statistics with the help of statistical packages SPSS 18.0 and STA-

TISTICA 6.0. In all, 1,936 parents of preschool children (from 1.5 to 7 years) were surveyed. All children were attending kindergarten (41 kindergartens in 9 districts of Moscow).

Results

Characteristics of the structure of family pastime

To determine the structure of each family's pastime, the parents marked on the questionnaires their preferences for kinds of activities shared with their child at home (Table 1). The table shows that most of the parents preferred reading (53.9%), playing (49.1%), taking walks (44.5%), and watching TV (25.5%). Other kinds of pastime were marked much less often. An important determining factor in the choice of activities was the parent's gender role. Thus, the mothers more often preferred walks and reading ($p < .008$), while the fathers were oriented to watching TV and playing video games ($p < .02$). This gap is rather significant, and it allows us to conclude that the mothers as opposed to the fathers were more active and more often involved in activities that they shared with their children.

Table 1. Parents' preferences for different kinds of activities shared with their child (%)

No.	How do you usually spend time with your child at home?	%
1.	Reading books	53.9
2.	Playing together	49.1
3.	Taking walks	44.5
4.	Watching TV	25.5
5.	Watching DVDs	18.3
6.	Doing housework together	16.8
7.	Building, constructing	16.2
8.	Modeling, drawing, painting	15.2
9.	Listening to music, singing, learning songs	10.2
10.	Playing video games	6.1
11.	My child arranges his/her pastime independently	9.3
12.	Unfortunately I do not have time left for my child	1.6

As the children grew older (up to 7 years), the parents' participation in activities shared with them decreased. More often the parents preferred to involve their older children in household tasks and invited them as partners and helpers in these tasks. The parents' withdrawal from activities shared with their children shows in a negative way in their own emotional disposition (Figure 1).
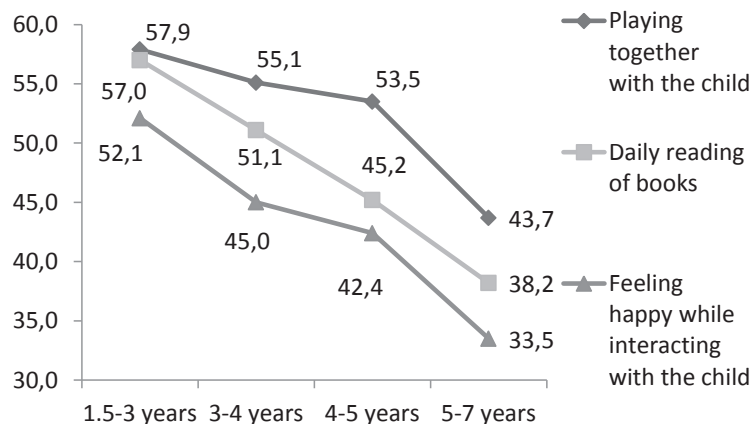
Figure 1. The dynamics of parents' involvement in activities shared with their child (playing, reading) and their emotional well-being as their child grew up (%)

The style features of parent-child relations (authoritativeness, orientation to equality) played a role in the organization of the parents' pastime with their children. Thus, among the parents who followed an authoritarian style of upbringing ("I believe that the child should implicitly obey parents and other grown-ups in the family") the percentage who preferred to read aloud to their child was 33.9%, while among the equality supporters ("I believe the child is an equal family member as well as the grown-ups") the percentage was much higher — 55.0% (p = .004). At the same time the authoritarian parents more often than the equalitarian parents said that their children independently organized their own time (21.4% and 8.1%, respectively, p = .004). Consequently, authoritative inclinations restricted the interaction between grown-ups and children in shared activities.

Analysis of the organization of a preschool child's pastime in a family

To gain more detailed information about the social and psychological characteristics of shared pastime, we used factor analysis to dissect the parents' preferences for various kinds of pastime by taking into account their family status (two-parent/separated family) and gender roles (mother/father), as well as the gender of their child. In other words, we looked at the difference between pastime organization for the boys and for the girls in two-parent and separated families. In our factor analysis a data matrix was formed in which the rows defined various kinds of family pastime (reading books, playing together, taking walks, watching TV, and so forth), and the columns represented fathers, married and single mothers, of boys and girls. A mesh (where a row and a column cross) indicated the percentage of the choice of a certain kind of pastime in a relevant group (among fathers of boys, fathers of girls, married mothers of boys, married mothers of girls, single mothers of boys, single mothers of girls). Thus, we put a 12*6 matrix through a factor analysis. Factorization of this matrix according to the Main Components method with a following rotation by Kaiser's Varimax criterion allowed us to create a simplified three-dimensional factor model that describes 85.9% of the total variance. As a

result three bipolar factors were determined: factor F1 (41.7%) "virtual communication (watching TV, playing video games) — real partnership (modeling, drawing, doing housework together)"; factor F2 (31.1%) "playing together — shared esthetic experience (listening to music, singing, watching videos)"; factor F3 (13.1%) "parents' passivity (lack of time) — interaction with children (walking together, reading books)."

To describe the different styles of the parents in organizing their children's pastime, we will show how the positions of the fathers and mothers spread across the factor spaces. As can be seen in Figure 2, factor F1 clearly differentiates the positions of the married and single mothers of girls on the negative pole ("real partnership") and the positions of the girls' and boys' fathers as well as of the single mothers of boys on the positive pole ("virtual communication"). Factor F2 differentiates the married mothers of boys and girls and the fathers of boys (positive pole — "playing together"), and the single mothers of boys and girls as well as the fathers of girls (negative pole — "shared esthetic experience").
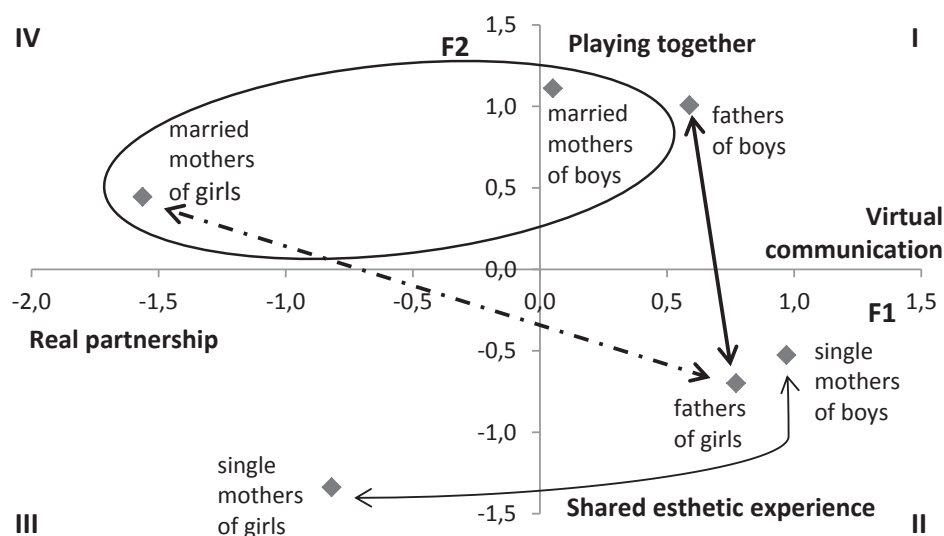
Figure 2. Location of fathers and of single and married mothers of boys and girls on the axes of factors F1 and F2

To aid understanding of the children's pastime organization, we will describe the positions of each of the parents. The married mothers of girls (see quadrant IV) played together with their daughters and involved them in a real partnership (modeling, drawing, doing housework). Thus, in the two-parent families the mothers were inclined to introduce their daughters to traditional forms of female behavior through play and housework. In the upbringing of boys (see quadrant I) the married mothers were less likely to involve their sons in shared practical activities; their main shared activity was playing together. A somewhat different position was occupied by the fathers of sons (see quadrant I). Like the married mothers, they preferred to play together with their sons, but at the same time they often chose

to watch TV together and to play video games (virtual communication). In other words, the fathers were oriented toward introducing their children to traditional forms of male pastime. Thus, in the two-parent families we can see the clear influence of the parents' gender roles: the mothers involved their daughters in traditional kinds of pastime for women, and the fathers in their turn introduced their sons to the typical ways men spend their free time.

It is interesting to note the variety of the fathers' positions in bringing up girls (see quadrant II). On the one hand, as with bringing up boys, the fathers involved girls in the traditional types of pastime for men (watching TV, playing video games); on the other hand, they were not inclined play together with their daughters, as they did with their sons (see quadrant I). Instead, they preferred to have an esthetic experience together with the child (listening to music, watching DVDs). We can conclude that in this case play activity was replaced by introducing the children to art. Notably, this introduction involved the active use of technical devices, and in these cases the grown-ups did not act as real mediators (did not read aloud to the children, did not draw with them, and so on).

It is interesting to compare the positions of the married mothers and the fathers when bringing up girls (see respectively quadrants IV and II). As we noted previously, when bringing up girls, the mothers, followed a traditional female line by spending time with their daughters (involving them in housework), and they also played together with the girls. Fathers, in their turn, were not inclined to play together with their daughters; instead, they shared esthetic experiences together. Note that in the figure the married mothers of girls and the fathers of girls are located in different quadrants. Thus in these two-parent families with a daughter the parents appeared to use a special strategy by employing the principle of the complementarity of maternal and paternal social-role positions.

In comparing the positions of the married and the single mothers, we find that the married mothers were oriented toward playing together with their children (positive pole of factor F2), and the single mothers, on the contrary, preferred those kinds of pastime that involved having an esthetic experience together (negative pole of factor F2). Thus, in the separated families the child-parent interaction in the form of play was reduced. Moreover, it may be supposed that the lack of a spouse sharpens a mother's need for positive emotions, and she fulfills this need by arranging certain situations so that she and her child experience esthetic satisfaction together. At the same time we should note the distinction between the single mothers of girls (see quadrant III) and the single mothers of boys (see quadrant II). The single mothers of girls followed the traditional female style of behavior common for married mothers of girls (partnership, involvement in housework); the single mothers of boys were more oriented toward the typically male style of pastime organization (watching TV, playing video games); doing so distorted these mothers' role.

The data from factor F3 ("parents' passivity —interaction with children") also contribute to an understanding of different styles of organizing a preschool child's pastime (Figure 3). As shown in the figure, the fathers of both boys and girls formed a common cluster with high degrees of factor F3, which is evidence of their general passivity in interaction with their children because of a lack of time. The married and the single mothers of boys, on the contrary, took an active position in orga-

nizing their sons' pastime: they read books, took walks, for example. Finally, the mothers (married as well as single) of girls did not show a strong tendency toward passivity or toward interaction with their children (almost zero parameters of factor F3).
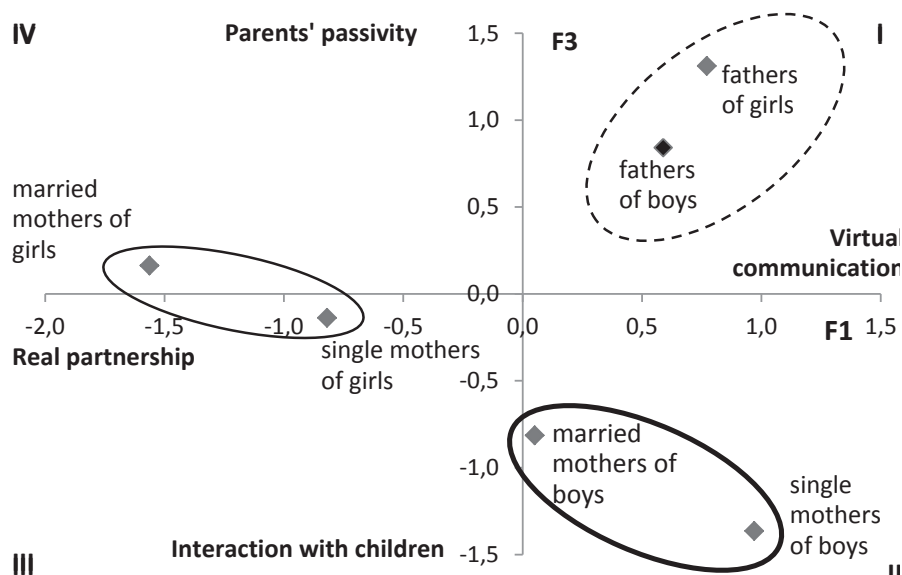
Figure 3. Location of fathers and mothers (married and single) of boys and girls on the axes of factors F1 and F3

Conclusion

The present research allowed us to draw several important conclusions:

1. As a child grows older (from 1.5 to 7 years), there is a decrease in parents' organizing of their shared pastime; this decrease has a negative impact on parents' emotional well-being.

2. Style features of parent-child relations influence the involvement of parents in sharing activities with their children. Parents who support equality actively interact with children more than do parents who are authoritarian.

3. Gender roles and family status determine the organization of shared pastime with children. Thus, mothers, in comparison with fathers, are more often involved in activities with their children. In two-parent families traditional gender roles have a distinct influence: mothers introduce daughters to housework, fathers invite sons to participate in various forms of men's pastime.

4. In the upbringing of a girl in a two-parent family, a special strategy is used in which parental roles are mutually complementary: fathers try to introduce daughters to culture using various technical means; mothers are more inclined to interact in partnership through playing together and doing housework.

5. In the upbringing of a boy in a separated family there is a clear distortion of the traditional maternal position in the organization of pastime: a single mother

reproduces the father's model, introducing her son to men's kinds of pastime (watching TV, playing video games, and such). Just as common for separated families is a reduction in shared play activities.

6. Analyzing parents' activity and dedication of time to their children allowed us to form three groups: (1) fathers of boys and girls, who specify a lack of time; (2) married and single mothers of boys, who take an active position in bringing up children; (3) married and single mothers of girls, who do not view their interaction with children as involving time-consuming effort.

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Indicators of reflection during acquisition of symbolic actions in preschool Colombian children

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The background of the study is the historic and cultural conception of development, which considers symbolic activities significant for preschool-age children. Our objective was to identify indicators of reflection as an essential feature of preschool development during the acquisition of symbolic actions at three levels: materialized, perceptive, and verbal. The design of the study was descriptive with qualitative and quantitative analysis applied. Included in this assessment of the development of symbolic function were 180 children of preschool age (from 5 to 6 years old) who were in the third year of formal preschool education in Bogotá, Colombia. Qualitative analysis of the results pointed out specific indicators of symbolic development at each level. On the materialized level such indicators were the sequencing of actions with substituted objects, the generalization of the symbolic features of objects, and a verbal, coherent explanation of the mode of substitution. On the perceptive level the indicators were the generalization of features in graphic representations, the possibility of using an image as a strategy for voluntary memorization, and a verbal explanation of the use of an image as a substitution. On the verbal level reflective explanation of verbal substitution was established as the positive indicator. The results permit us to posit the usefulness of clear qualitative indicators for assessment of a child's level of psychological development and readiness for school learning at the end of preschool.

Keywords: symbolic development, preschool age, reflection, psychological development, actions with objects, symbolic actions

Introduction

Within the historical and cultural conception of development, signs and symbols are essential psychological instruments for transforming the psyche and the internal world of a child (Vygotsky, 1931/1983, 1982 /1993). Vygotsky stressed that the signs can be used, first, on the external social and material level and, second, on the

individual, internal, and ideal level (Elkonin, 2009; Quintanar & Solovieva, 2009). In other words, internal symbols may appear only after corresponding internal actions in which such symbols might be used (Vygotsky, 1983 /1995). Afterword, within activity theory, the regularities of acquisition and the types of orientation used for actions with symbols were taken into account during the teaching process (Talizina, 2009).

At preschool age the presence or absence of symbolic function may be observed within play activity. Collective forms the social role-play are specifically useful for the introduction of symbols at the external, materialized level (González-Moreno, Solovieva, & Quintanar-Rojas, 2014a, 2014b; González-Moreno & Solovieva, 2014a, 2014b). Interaction between adults and children within play activity may be observed in materialized, perceptive, and verbal symbolic actions. It is possible to suppose that the formation of symbolic actions follows the typical sequence of stages for the formation of mental actions proposed by Galperin (1966, 1998).

Materialized actions refer to the fact that the child starts to use material objects in a particular way: an object is used in external action as a substitute for another object, which is absent (or just not used by the child). The child may express orally the meaning of such a substitution. For example, a child using a pencil as a comb for a dollcan express that he/she is combing the doll's hair using the pencil. The child learns to reproduce the models of actions with concrete objects, and by symbolic representation such models pass to a more generalized level.

Such types of actions may be called *symbolic actions*, which increase significantly within play activity. The child starts to use objects not only according to the external or functional meaning but also according to the new "denomination" (Petrovski, 1985). Such a change in the use of objects also means that the child has developed the internal, constant functional image of the corresponding object and may apply this image in new, "symbolic" situations.

In this process the operations with the object correspond to the proprieties of the "absent" object, which is represented within the current symbolic action. The whole process is accompanied by the gradual development of consciousness of actions and of the meaning of objects in different actions. Plays with rules and social role-play occupy an important place in psychological development. It is possible to suppose that the absence of these kinds of play activities or the lack of possibilities for being included in such activities has a negative influence on the acquisition of symbolic function at preschool age.

Later on, symbolic actions pass to the perceptive level, on which it is possible to accomplish substitution or representation of the object graphically. "Perceptive actions require … the perceptual recognition of the elements and the comprehension of the images [that] are the symbols which may serve for the child and other people … to represent objects and events, real or imaginary" (Salsa & Vivaldi, 2012, p. 135).

The level of verbal symbolic actions is the most complex at preschool age and includes the generalization of linguistic elements. A typical feature of this level is that a word has meaning and object reference (Luria, 1976). The word may be converted into a sign because it may represent not only the concrete object but also

the imaginative, symbolic object (an event, situation, feature, or action), which is not directly included in the meaning. In other words, each word has a polysemic structure that is not accessible to infants but can appear as a new, qualitative possibility at the end of preschool age. "Within the process of ontogenetic development the meaning of the words-signs is changing and its functions as well. Such changes proceed from simple denomination to complex media of abstraction" (Vygotsky, 1934 /1991b, p. 443). The meaning of the words acts as the unity within verbal symbolic actions.

During preschool age, gradual symbolic development on the materialized, perceptive, and verbal levels appears together with self-reflection. Such reflection indicates a more stable symbolic level and the possibility of flexibly using symbolic means. We can suppose that such flexibility of reflection may be related to the phenomenon of the interiorization of symbolic means (Vygotsky, 1982/1991a). "When external operation converts into internal operation, interiorization or the passage from external to internal level can take place" (Vygotsky, 1983/1995, p. 165). The presence of an indicator of reflection at three levels (materialized, perceptive, and verbal) shows the complex, gradual development of symbolic function, a process in which it is necessary to denominate particular ways of acting with objects as substitutes for other objects (images or words).

All these essential qualitative changes can take place at preschool age. "Symbolic function is essential for cultural activity and creates important conditions [for the] development of semiotic concentration of the means" required for posterior apprehension at school (Solovieva & Quintanar, 2012, p. 27). It is almost impossible to imagine learning concepts at school (Talizina, 2009) without the consolidation of symbolic function at preschool age.

At the same time, not all children show the same level of flexibility or reflection for using symbolic means. In our previous studies, poor acquisition of symbolic function at all levels was detected in groups of preschool children in Mexico and Colombia (Barreto, Bonilla, & Solovieva, 2013; Bonilla, Solovieva, & Jiménez, 2012; González-Moreno, Solovieva, & Quintanar-Rojas, 2011; Solovieva & Quintanar, 2013). At this age, qualitative indicators of the acquisition of symbolic function are important for psychological and pedagogical knowledge and assessment. For this reason, a goal of the present study is the identification of indicators of reflexive symbolic development in materialized, perceptive, and verbal actions at school age.

Method

Design of the study

The design of this study was descriptive. Our research was based on a qualitative conception of development and assessment and was concentrated on identification and analysis of typical parameters of psychological phenomena. The program MS Excel was used for the collection of data, and statistical analysis was provided by R Development Core Team (2014).

Participants

The participants in the study were 180 preschool Colombian children from 8 educational institutions in Bogotá. The age of the children was between 5 and 6 years, and all of them were in the third year of regular preschool. Four institutions were private, and the other four were public. Two types of institutions were selected because we were pretending to study general typical features of psychological development in educational preschool institutions at different levels. The institutions were located in different zones of the city and were selected on the basis of their agreement to take part in the research. Inside each institution the participants were selected by chance. Table 1 show that all participants were distributed homogeneously according to gender and kind of institution.

Table 1. Characteristics of the participants according to gender and kind of institution

| Genders | Kind of institution | | |
	Public	Private	Total
Girls	27%	22%	49%
Boys	28%	23%	51%
Total	55%	45%	100%

Table 2. Structure and content of assessment

Level	Task
Materialized symbolic actions	1. The child is asked to propose a play with a pencil, in which the pencil may be used as "something else." 2. The child is asked to solve a problem in which "the cars cannot pass through the street because the roads are being repaired, and it is necessary to find special signs to prevent accidents." 3. The child is asked to propose signs to show "interesting places for recreation in the park." 4. The child is asked to determine and to say which of two tables is longer than the other and to use any object to measure the length.
Perceptive symbolic actions	1. The child is asked to draw (create) pictograms for "angry teacher," "joyous party," and "a letter to mother about tasty food to prepare for Sunday." 2. The child is asked to draw the route from "home to the nearest shop or market." 3. The child is asked to draw "places in the town and mark the places with signs in order to remember the places." 4. The child is asked to "imagine a street and draw a sign that prohibits the movement of cars."
Verbal symbolic actions	1. The child is asked to answer the question: How can we know whether one phrase (sentence) is longer than another? ("Nuestro país es Colombia" or " Me gusta jugar"). 2. The child is asked to answer the question: How can we know whether one word is longer then another? (automobile or train). 3. The child is asked whether a "cow" might be named a "cat" and why. 4. The child is asked to choose a character from a fairy tale and to tell the story in the "first person" on behalf of the chosen character.

Instrument of assessment

In order to assess materialized, perceptive, and verbal levels of the development of symbolic function, the protocol for qualitative evaluation was used. This instrument allows the evaluation of the performance of diverse kinds of actions of substitution in collaboration with the child (Solovieva & Quintanar, 2014). In other words, the instrument helps to evaluate the zone of proximate development, which in our case implies the possibility of the child's performing symbolic actions with the external help of an adult (Vygotsky, 1982 /1991b). External help for orientation implies the elaboration of the base of action. Such orientation allows the construction of the image of the present situation, the identification of the meaning of the whole situation (its necessity or sense for the subject) and its essential basic components, the elaboration of a plan for future actions, and the regulation of the execution of the action (Galperin, 1966, 1992). Table 2 presents the structure and the content of the scheme for evaluation of actions on the materialized, perceptive, and verbal levels (Solovieva & Quintanar, 2014).

Procedure

To begin, all private and public preschool institutions were contacted and informed about the aim of the research. The directors of the institutions and the parents were asked to agree to take part in the study.

The scheme of the assessment of symbolic function was applied to each child individually in one session of 1 hour duration. Afterward, the analysis of the obtained results was carried out in order to characterize the responses of the 180 children.

Each child was assessed by a student in the department of pedagogy or a student at the Ph.D. level in educational sciences (one of the authors of the article). Assessors registered all performances and oral expressions of the children. Additionally, three experts were present during the procedure with each child: two psychologists and one language pathologist. The goal of this procedure was to obtain objective opinions about the absence or presence of symbolic function at different levels in each child. We then established the degree of coincidence in the opinions of the experts. All experts were previously informed about the types and levels of actions used in the assessment. After observation, each expert, individually, established the presence or absence of symbolic substitution at each level. Video recordings were used in order to provide evidence of the whole procedure. The experts analyzed the obtained data to establish the statistical coincidence of their evaluations. The collection of the data was done by using MS Excel, and statistical analysis was provided by R Development Core Team (2014).

Results

Based on the children's performance during assessment, types of positive and negative responses were established (Table 3).

Table 3. Types of responses to the tasks for assessment of symbolic function in actions

Level	Tasks	Types of response	
		Positive	**Negative**
Materialized symbolic actions	Substituting another "imaginary" object for the pencil	*Substituting another object for the pencil in one action *Representing with gestures and sounds the action of substitution * Relating two actions to each other according to substitution *Sequencing actions of substitution *Inventing a symbolic play with the substitution of another object for the pencil *Reflexive substitution: the child explains the whole procedure of substitution	*Direct and concrete usage only *Losing the goal of the activity *No response *No explanation of the actions *Simple manipulation of the pencil with no specific goal (absence of any action)
	Traffic signs	* Taking the initiative for finding traffic signs *Solving the problem using proposals from an adult *Reflexive explanation of the way of using signs in the task	*Direct usage of chosen objects *No proposals for signs *No explanation for actions *Simple, unspecific manipulation with no goal *No answer at all
	Signs for places in the park	*Taking the initiative for finding signs in the park *Solving the problem using proposals from an adult *Reflexive explanation of the way of using signs in the park	*Direct usage of chosen objects *No explanation for actions *Simple, unspecific manipulation with no goal *No answer at all
	How to know if one table is longer then another	*Proposing measuring the table with an object appropriate for longitude *Comparing ropes and determining the longest one (child thinks that the rope may substitute for the table) *Reflective explanation of diverse possibilities for and ways of measuring the table	*Simple, unspecific manipulation with no goal *No answer at all
Perceptive symbolic actions	Drawing pictograms and letter	*The image produced by the child reflects the content of the words (pictograms) and the content of the letter *Usage of gestures and expressions corresponding to the image *Selection of a common symbol for expression of the content * Can explain what was drawn and why *Can remember what was drawn and why	*Drawing does not correspond to the instructions *No explanation for the drawing *Can't remember what was drawn and why *Image cannot be recognized by the child or by any of the experts
	Drawing the route from home to the shop	*Drawing reflects the "route from the house to the shop" *Usage of gestures and expressions correspondingt to the image *Selection of a common symbol for expression of the route * Can explain what was drawn and why *Can remember what was drawn and why	*Drawing does not correspond to the instructions *No explanation for the drawing *Cannot remember what was drawn and why *Image cannot be recognized by the child or by any of the experts

Level	Tasks	Types of response	
		Positive	Negative
Perceptive symbolic actions	Drawing signs for places in the park	*Drawing reflects "places in the park" *Usage of gestures and expressions corresponding to the image *Selection of a common symbol for expression of places in the park *Can explain what was drawn and why *Can remember what was drawn and why	*Drawing does not correspond to the instructions *No explanation for the drawing *Cannot remember what was drawn and why *Image cannot be recognized by the child or by any of the experts
	Drawing traffic signs	*Drawing reflects the traffic signs *Usage of gestures and expressions corresponding to the image *Selection of a common symbol for expression of traffic signs *Can explain what was drawn and why *Can remember what was drawn and why	*Drawing does not correspond to the instructions *No explanation for the drawing *Cannot remember what was drawn and why *Image cannot be recognized by the child or by any of the experts
Verbal symbolic actions	How to know which phrase is longer	*Responds that the sentence is longer because it has more words *Responds that the sentence is longer because it has more sounds *Responds that it is necessary to count the words *Explains reflexively the correct answer	*Responds in an incoherent way *Combines two phrases *Changes parts and words in phrases *Changes the order of words in phrases *Mentions just one part of the phrase
	How to know which word is longer	*Responds that the word is longer because it has more sounds *Responds that the word is longer because it has more letters *Responds that it is necessary to count the sounds *Responds that it is necessary to count the letters *Responds correctly and reflexively to the question	*Responds incorrectly and chaotically *Combines two words *Changes the words *No answer at all
	Is it possible to call a cow a "cat"?	*"Yes, it is possible, it has horns and is a cow" *"The cow will not give milk, only the word is changing" *Reflective explanation of the whole situation: "If we change the word, the object will not change"	*"Will not give milk" *"Will be like a cat and not a cow" *Incoherent speech production *No answer at all
	Telling the story "from the point of view of a character"	*Can tell the story from the point of view of a character chosen by the child *Correct usage of personal pronoun "I" in the story *Reflexive explanation about the selection and the purpose of the character	*Can tell the story but not from the point of view of the chosen character *Incorrect usage of personal pronoun "I" in the story *Incoherent speech production *No answer at all

After identification of the diverse types of all the answers of the children, the results were classified according to the levels of symbolic development. This classification permitted us to establish indicators for the positive development of symbolic actions at the materialized, perceptive, and verbal levels (Table 4). During evaluation each expert assigned 0 or 1 to each observation (0 = no symbolic action observed; 1 = symbolic action observed) using formal protocols for each of the 180 participants.

Table 4. Indicators of symbolic function at different levels of action

Level	Indicators of reflexive symbolic development	Description
Materialized symbolic actions	Sequence of actions of substitutions	The child describes the sequence of actions with objects as substitutes and achieves actions of representation. For example, the child says that the pen is a "plane," "it can move as a plane, can fly away, and can come back."
	Generalization of the symbolic features of an object	The child generalizes the action and shows different ways of substituting. During representation the child uses features of the represented object instead of real features of a real object. For example, the child knows and can explain that the pen is a "plane" and produces the sound of the motor of the plane (rrrrr) while moving the pen.
	Verbal, coherent explanation of the substitution of one object by another	The child can give a coherent explanation of substitution. For example, "I know that this is a pen, but I can play and it seems that it is a plane and the plane can fly."
Perceptive symbolic actions	Generalization of features in the produced picture (pictogram)	The child can graphically generalize essential features of an object.
	Proposed graphic symbol can be understood (recognized) by the child and by an expert	The drawing can be recognized by the same child later on and also by another person.
	The graphic image can be used by the child as a strategy for memorization	The child can remember his/her drawing and can explain its meaning.
	Verbal, coherent explanation of the proposal to create a drawing as a substitute for an object or situation	The child can explain the content of the drawing. The child can answer questions about the content and the elements of the drawing. For example, the child can answer such questions as "Where does this path start?" "How can we get to the shop from the house?" "Where does the path finish?"
Verbal symbolic actions	Verbal, coherent explanation of the whole solution Coherent story from the point of view of the character	The child can explain the whole answer. For example, the child can explain the chosen character and the whole story.

In order to establish the degree of coincidence of the evaluations of the children's answers by the three experts, Kendall's coefficient of concordance (W) was used (Kendall & Babington, 1939). The level of significance chosen for our analysis was 1%. In this case, if the *p* value of W is bigger then 0.01, the result is considered to be product of causality and is not significant statistically. However, if the *p* value of W is less than 0.01, the result is the product of intrinsic coincidence according to the experts and is statistically significant. It was determined that the three experts gave coincident evaluations of the responses of children at the level of 1% of significance (Table 5). In the table only positive responses are taken into account and not all types of responses of all the participants.

Table 5. Statistical analysis of indicators for the reflexive development of symbolic actions on different levels

Level	Indicator of reflexive development	Number of children	Percentage of responses	Interval		Kendall's W	*P* value
Materialized symbolic actions	Sequence of actions of substitutions	28	15.56%	10.75%	21.87%	1.00	0.00**
	Generalization of features of objects	21	11.67%	7.53%	17.49%	1.00	0.00**
	Verbal, coherent explanation of substitution of object	12	6.67%	3.65%	11.63%	1.00	0.00**
Perceptive symbolic actions	Generalization of the symbolic features for representation on the graphic level	17	9.44%	5.76%	14.93%	1.00	0.00**
	Use of the drawing as a strategy for memorization	16	8.89%	5.33%	14.28%	1.00	0.00**
	Recognition of the symbol by the child and by an expert	15	8.33%	4.90%	13.62%	1.00	0.00**
	Explanation of the image according to the task (situation)	11	6.11%	3.24%	10.95%	1.00	0.00**
Verbal symbolic actions	Coherent explanation and telling of the story	4	2.22%	0.71%	5.96%	1.00	0.00**

**Significant at 1%

Discussion

The purpose of our research was to identify indicators of the reflexive acquisition of symbolic function on the level of materialized, perceptive, and verbal actions. Analysis of the obtained data permitted us to conclude that for materialized ac-

tions indicators of reflexive development are the sequence of actions of substitution, the generalization of the symbolic features of an object, and an explanation of how the process of substitution was managed. For perceptive symbolic actions such indicators are the generalization of the symbolic features of the represented word (or situation) in the image, the use of the image as a means (strategy) for positive memorization, the recognition of the produced image by the child and by an adult, e the child's reflexive explanation according to the content of the task. On the level of verbal actions only one indicator can be distinguished; that indicator is the coherent explanation of and the production of an adequate story following the verbal instructions of an adult.

In our opinion, one of interesting findings of our study was the identification of indicators that might provide precise information for a psychologist about a child's level of functioning or initial acquisition of symbolic function. The results show that verbal regulation was present as an indicator of reflexive execution at the level of materialized actions. At the same time, an essential difference among the levels was that on the materialized and perceptive levels verbal regulation would not by itself be enough for efficient realization of the action of substitution. We can see that for only 4 children within the studied population was the verbal symbolic level accessible (Table 5). Such data permit us to suppose that the achievement of a high level of symbolic function (verbal level) at preschool age is possible only in connection with the previous positive development of symbolic external materialized and perceptive actions. Gradual use of these external means in plays and artistic activities is essential for positive qualitative psychological development (Vygotsky, 1926/2001). In our previous studies the levels of symbolic function were determined in assessed populations of Mexican and Colombian preschool children (Bonilla et al., 2012; González-Moreno et al., 2011). At the same time, it is possible to confirm that specific orientation with the help of external signs and symbols proposed by an adult through group social role-play can guarantee positive changes in symbolic development in children between 5 and 6 years old (García, Solovieva, & Quintanar, 2013; Solovieva & Quintanar, 2012).

The complex level of symbolic development, the level of verbal actions of substitutions, can be characterized as the level on which words start to operate not only as a means of communication and regulation but also as a means of mental internal representation of phenomena and situations. Vygotsky (1931/1983) explained that "verbal actions modify the process of thinking and convert it into a verbal, conceptualized, and mediated process. At the same time, these actions permit [one] to precisely organize and orientate the perception, which converts to a selective, objective, and exact process."

As we mentioned, the presence of indicators of reflexive development at the level of verbal actions reflects the possibility of representation at a high level. One of the main difficulties pointed out in our study is the low level of symbolic development in the studied population, which confirms our previous findings. For example, only 15.56% of assessed children succeeded in realizing the sequence of actions of substitutions in reflexive materialized symbolic actions; only 9.44% showed some kind of ability in generalizing symbolic features on the perceptive level, and only 2.22% showed reflexive verbal development of symbolic actions. Thus, regular children with no evident developmental problems do not show a sufficient degree

of symbolic development at the end of preschool. The difficulties of reaching this benchmark increase from the materialized level to the verbal level. This situation indicates the necessity of reconsidering the strategies for pedagogical and psychological educational work in both private and public institutions (González-Moreno & Solovieva, 2014b). The common traditional strategy preschool educators use first of all is repetitive reproductive tasks such as repetition of vocalizations, numbers, and letters. Such tasks have nothing to do with the necessity of developing symbolic function in materialized, perceptive, and verbal actions. We are convinced that the best strategy for changing the present situation is by remembering and emphasizing preschool activities that involve social role-play (Elkonin, 1980; Solovieva & Quintanar, 2012) and all kinds of narrative-play (Bredikyte, 2011).

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The technique of project activity:
A new approach in Russian preschool

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Project activity has a long history of implementation in education (Kilpatrick, 1918). This article describes the approach to project activity that became widespread in preschool education in Russia in the late 1990s. This approach is based on the cultural-historical theory of Vygotsky (1978), Venger's (1988) understanding of intellectual giftedness, as well as an understanding of project activity proposed by Leontiev (2000).

At the heart of project activity lies children's exploration of the space of possibilities — that is, their search for action options that correspond to their personal motives and express their individuality. The main features of project activity are the problem situation to be presented to the child; the subjectivity of all its participants, including teachers; and its nature, which includes its social context.

Three main types of project activity are presented: research, creative, and normative; each has its own structure and value for children's development. Examples of their implementation in preschool settings are provided. The impact of project activity on all its participants in preschool — children, teachers, parents — is addressed.

The article shows the effectiveness of project activity for educational work with both intellectually gifted and normally developing children.

Keywords: project activity, giftedness, intellectual development, space of possibilities

The project-activity approach is widely used today not only in school education but also in work with small children (for example, Grzegorzewska & Konieczna-Blicharz, 2011; Katz & Chard, 2000; Kogan & Pin, 2009). Although project activity has been a part of Russian school education since the 1990s, in preschool education it hasn't been recognized as a separate tool for organizing children's activity.

Historical background

Project activity in Russia originated as a technique for working with intellectually gifted children and was developed by a team of researchers under the scientific guidance of L. Venger (1988). Venger based his research on the cultural-historical theory of L. Vygotsky. According to Vygotsky (1978), child development is a gradual entry into human culture through the mastery of cultural tools—that is, through the development of opportunities to explore the world and interact with it using culturally available methods. These culturally available tools are used not only to change the child's interaction with the world but also to change the child. Vygotsky's student A. N. Leontiev (2000) defined children's psychological development as a process of mastering various types of activity, such as play and productive activity (building, drawing, sculpting, and so forth); in other words, child development is conditioned by activity and occurs during it. Therefore, the products of children's activity are not deemed to seriously affect their development (for example, a drawing made by a child is a part of drawing activity, which exists outside the system of social interactions).

We began our work in 1998 in the city of Novouralsk with 2 preschools and 50 children who were 5 years of age (27 girls and 23 boys, M = 62 months). The city was a scientific center with a large population of highly skilled specialists. The proportion of children with a high level of cognitive development in the city's kindergartens was higher than the proportion in the rest of the country's preschools.

Our research showed the existence of two opposing approaches in educational work with preschool children (Veraksa & Bulicheva, 2003). In the first one, children are given maximal freedom of action; in the other their activity is rigidly determined by the grown-ups. Both approaches have, in our opinion, serious shortcomings. In the first one the entire activity of children, although encouraging their individuality, doesn't realize itself in cultural forms and therefore precludes children's proper acquisition of cultural tools and of socialization. In the second approach, even though activity is entirely cultural, it is absolutely deindividualized. For this reason there is a particular need not only to get children acquainted with the culture but also to give them the opportunity to meaningfully express their individuality in cultural forms.

Our task was to combine these two approaches in a way that encourages children's initiative. Our work resulted in project activity, in the frame of which children create socially significant products using culturally acceptable means. We turned to project activity in our work with gifted children because the need for socially meaningful cultural expression of their individuality was vivid and clearly presented. Project activity is not something a child does (drawing, reading, sculpting) but the process for doing so. In other words, the participating kindergartens had to rethink children's activity within the framework of the project approach (as a rule, project activity in kindergarten was presented one to two days a week). Later this technique proved to be effective for children at various levels of cognitive development.

Main features of project activity

The first feature of project activity is that it is used only where there is *a problem situation that cannot be resolved by direct action*. By *direct action* we mean an action that is performed without a preliminary orientation to the situation and that does not require identification of resources (everything necessary for performing the action is available to the child). For example, while drawing, a child notices that the paintbrushes create a mess when lying on the table. If the child perceives this situation as a problem, she will come to the conclusion that something has to be done to keep the paintbrushes from touching the table and the clean sheets of paper lying around. In this case the child's actions enter what Vygotsky defined as a zone of proximal development: on the one hand, the experience is new to her; on the other, she won't be able to realize her intention to resolve the problem without a grown-up's help.

The second feature of project activity is that its participants must be *motivated*. Simple interest is not enough. It is necessary that both teacher and child bring to the project activity not only their understanding but also their personal meanings. For example, preparation for a holiday is a common event well described in many educational programs. Children may be interested in preparing for it, but the real work will begin only when teacher and children try to discover its true meaning for them. What is this holiday about? Is this a day special to a person or a country or is it a reminder of an important event? How do we celebrate this holiday? Why do we celebrate it? What are the ways of expressing our attitude toward the holiday? As soon as meanings are defined, the search for ways to present them can begin.

The third feature of project activity is the *participants' subjectivity,* including taking the initiative and self-manifestation. But the subjectivity of the child may manifest itself with varying degrees of intensity: a child may express an original idea (one not previously expressed in the group) or may support and slightly reshape the idea of another child. While discussing the gift options for the March 8th holiday (International Women's Day), one boy in our study decided to make his mother a card. Another boy supported this idea, saying that he could make a card for his mother and also one for his sister. From the perspective of an adult, the same idea was voiced: the creation of greeting cards. In this case, an adult might say, "We've already mentioned cards. Try to think of something else." However, it is more productive to support the initiative of the second child, emphasizing that a card for a sister was not proposed previously. Such an expression of support has several advantages: first, the adult opens new space for creative work (the adult can ask about the difference between cards for mothers and for sisters and can mention grandparents, teachers, and so forth); second, by supporting the initiative of the child, the adult gives him a positive experience of speech, and the next time he will offer his own opinion again. This is especially important for children who do not have positive social experiences of taking the initiative.

The fourth feature of project activity is its *addressed* nature. Because in project activity children express their attitudes and personal meanings, they always look

for the recipient (the addressee) — the person to whom their statement in the form of a product is addressed. For this reason project activity has a pronounced social dimension and, ultimately, is one of the few socially significant activities available to preschoolers. We agree with Glăveanu (2011) that one of the signs of giftedness, creativity (expressed in the dimensions of product, process, personality, and pressure), can be fully present in all children. Project activity is built on these dimensions of creativity.

The last, but not the least, feature of project activity is *exploration of the space of possibilities*. Practical work with gifted preschoolers (Veraksa & Bulicheva, 2003) showed that goal setting and planning of their own actions do not define the actual process of the movement of children's thought in search of a solution. The most valuable activity for children is to search for a way of acting that will correspond to their personal motives, will express their individuality. Because the relationship between the child's own experience and its cultural embodiment are not obvious, before moving on to planning the child explores the space of possibilities of the situation. Almost any task can be turned into a project if an adult helps a child to unlock this space, which is present in every situation. For example, to make a bird feeder in winter we must consider various aspects of the situation. What kind of birds (large or small) do we plan to feed? How can we make the feeder so that it does not overturn when a bird sits on its edge? How can we make a feeder that will not be overturned by the wind? How can we protect it from being covered with snow so that the food will stay accessible to the birds? Answers to these questions require selecting materials for making a feeder and identifying the feeder's size, shape, ways to attach it to a tree, and so forth. After a detailed discussion, when the best option is selected, actual planning begins. Now the child will have an increased understanding of every stage of making the bird feeder.

Realization of children's intentions and projects, as a rule, requires technical abilities that children lack. Therefore support from grown-ups, especially from teachers and parents, is needed. Such support allows children and grown-ups to understand each other better and establishes caring relationships between them.

The majority of preschool teachers are caring and willing to support children in their attempts to realize their goals. But it is important that in giving support teachers don't become proactive and attempt to formulate and perform creative actions for the children, including proposing options before the children think of them first.

Grown-ups, according to Vygotsky, are carriers of cultural norms, and as such they define a child's zone of proximal development. However, acting within a space defined by a grown-up doesn't make a child a subject of her own activity. Hence the task of the teacher is, on the one hand, to be led by the child in her activity and, on the other hand, to introduce the content of her activity to the culture of her kindergarten. For example, when a child completes a project, the task of the preschool teacher is to get other children and parents acquainted with the results.

Types of project activities

We discerned three main types of projects in project activity: research, creative, and normative ones. This classification is based on an approach to the regulation of child behavior established by Venger, Diachenko, Astaskova, and Bardina (1995); Diachenko, Bulicheva (1996); and Veraksa (2011). According to this approach children perform three types of tasks in the process of development: mastering current norms (research), expressing their own views of reality (creative), and changing the current situation (normative). Each of these tasks has its own characteristics, structure, and stages of implementation.

Research projects

A typical research project is an individual endeavor, takes about a month to complete, and consists of four stages.

Stages. The first stage is the search for a problem situation. Usually the teacher carefully monitors the activities of the children, identifies areas of interest for each child, and then creates a special situation in which each child is given a research question. For example, a girl who loves to play with dolls and dress them can be directed to the question of how the dolls look, what they are wearing, and so forth. Or parents together with their children can formulate a research problem.

In the second stage children look for information that will help them to answer the research question and to realize the project. In our study we usually suggested that the children prepare with their parents a colorful album consisting of several pages. The first page contained the main research question. On the second page the importance of this question was expressed from the perspective of the children, their classmates, parents, and friends. The children conducted a survey and drew illustrations depicting the content of the replies given by their classmates, parents, friends, and themselves. The third page displayed a variety of answers to the question. Here people, books, television programs, other media were the sources of information. The children used clippings, photographs, drawings. Grown-ups assisted in producing the effect the children wanted. The next page was devoted to the expression of the children's own attitudes toward the research question. They could state an original opinion or defend the already-expressed opinion of another person. In the minds of the children different strategies for obtaining an answer were formed — turning to an adult (parent, teacher), a classmate, a book. In other words, understanding ways to transfer knowledge created a new space of possibilities. At the bottom of this page, the children described the method they used for obtaining information and justified the benefits of the chosen method. Here many of the children needed an adult's help in formulating these benefits, which were discussed with the children but not necessarily verbally — various images were used. On the last page of the album the children reflected on the possibility of using the project in real life: for example, they could tell a group of their friends about the project or they could organize a game based on the project.

The third stage is the presentation of the projects. Children with their parents should approach the teacher about putting their presentations into the class schedule. Parents should confirm the possibility of attending this exhibition and should help their children to prepare a short summary about the work done. In the presentations, children can tell about their projects and show relevant images and notes.

Figure 1. Presentation of the projects

The fourth stage requires the teacher to transfer the knowledge gained in playful form. At the end of the exhibition, the projects can be displayed in the kindergarten's library, stapled in a book that is easily accessible to everyone. Our experience shows that research projects not only enrich the knowledge of preschool children and stimulate their cognitive activity but also influence the content of their play.

Lessons learned from research projects. Working on research projects is interesting because children's knowledge base can be surprisingly vast, and it grows constantly as they gain new information using all the tools available. In addition, the presentation of their own projects changes their relationships with their classmates. Misha wasn't popular among the other children, who wouldn't include him in their play. As he accepted his status, he became more distant, and making contact with the other children became even harder for him. When project activity was introduced, Misha presented a project about how a car works. To complete the project, he learned not only about the major components of a car and what they do but also about major car brands and their pros and cons. After presenting his project to his classmates, in their eyes he became a car expert; he earned their respect and became very popular among the boys, with whom his communication was improved.

We were surprised to discover that project activity can help a child to cope with various situations of everyday life. Five-year-old Ayten's project, for example, was titled "Why Do Dogs Bite?" Behind this project was a problem that the girl had encountered: kind creatures living with humans and devoted to them can also harm them.

After getting answers to her question from her parents and other grown-ups, Ayten came to the conclusion that dogs bite if they are guard dogs and are supposed to bite, or if they are being treated badly. At the end of her project, Ayten said that dogs need to be petted and treated nicely, and then they won't bite. In the photograph Ayten is petting her grandma's dog. She also taught her friend Dasha to pet dogs.

It is not necessary to purposefully search for a personal matter to be explored in a child's project. However, if a child expresses a desire to work on such a project, this initiative must be supported. A research project can be a useful tool for resolving personal questions that preoccupy children emotionally, and the value of such an experience is hard to overestimate.

Creative projects

Creative projects are usually carried out by groups of children with or without their parents. Although each of the children presents ideas for the project, only one idea is selected. This choice is not easy for children to make; they must learn not only to defend their own position but also to objectively evaluate it. In other words, they have to overcome their centration (Piaget, 1951).

Stages. In the first stage preparatory work is carried out; teachers discuss possible topics for projects that are connected with significant social situations.

The second stage is aimed at revealing children's knowledge and attitudes. For example, if the theme of a collective project is a holiday, children need to know about it, to update their own knowledge, and then to express their attitude toward the holiday, what feelings this holiday invokes. The main task is to bring children to the theme of the project and to formulate a primary task.

> Teacher: Can you imagine, I went into a shop today and saw a huge crowd of people there; children and grown-ups were choosing different presents. Maybe today is somebody's birthday? What do you think?
> Polya: Yes, it is because in three days it is Valentine's Day. My dad and I are also choosing a present.
> Teacher: What is a holiday? What do you think a holiday is?
> Agata: It is when there is fun.
> Polina: It is when there are gifts.
> Kolya: It is when there are sweets.
> Sasha: It is when you are in high spirits.
> Teacher: And who congratulates whom on that day?
> Children: People in love. You congratulate the one you like, the one you love.
> Ilya: And I love our kindergarten and our group.
> Nikita: Let's also congratulate ourselves!
> Teacher: Let's all think how to congratulate our kindergarten.

In the third stage children offer a variety of ideas for a project. The teacher needs to take notice of the most original ideas in order to repeat them to the children. The children are then encouraged to draw pictures of their ideas.

> Agata: I think that any song can be put on video and later shown on TV. My grandpa did that once. I think it is pleasant for someone.
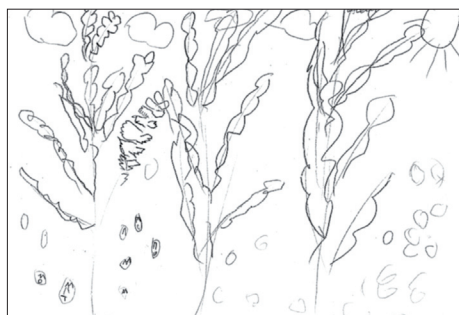
Figure 2. Alya's drawing (to draw a picture)

Figure 3. Kolya's drawing (to put on a play)
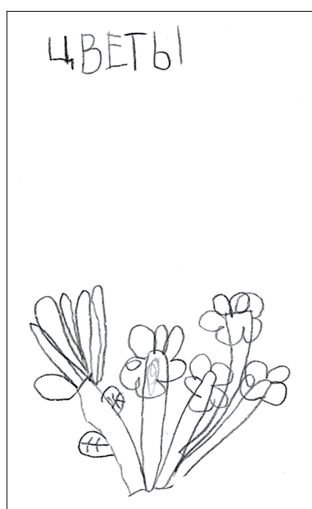
Figure 4. Nikita's drawing
(to give flowers)

Seva: I think that the best thing is to give something; on this day people always give each other something. I propose that you give your favorite toys to the one you love.

Kolya: I thought of putting on a little play from some fairy tale; it's fun.

Polina: I think we can congratulate our kindergarten this way: we can bake edible valentines. Three days is enough time to bake. They can be baked out of a salty dough; they are nice to look at this way, and if they are made from edible dough, it is nice and tasty.

Olya: I would to make postcards because they can be made as valentines. I would make them for close ones, teachers and friends. In the postcard there would be a greeting and hearts.

Nikita: We could give flowers. I think that flowers are the best present.

Alya: A picture could be drawn; it is beautiful and brings joy to all.
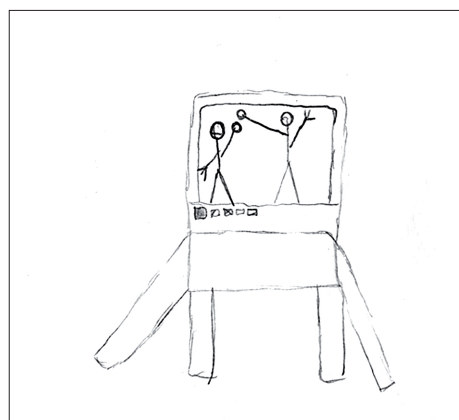
Figure 5. Agata's drawing (to shoot a video of a song and show it on TV)
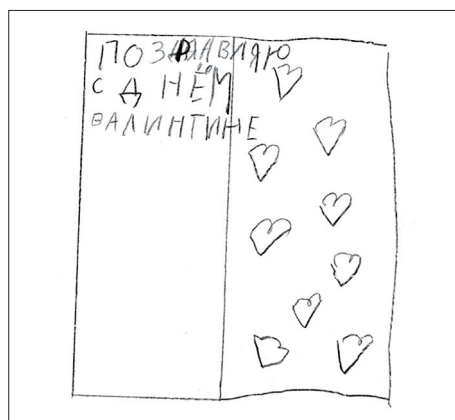
Figure 6. Olya's drawing (to make a postcard)

In the fourth stage, children talk about their pictures and present their ideas; teachers and classmates ask questions. The task of this stage is to find a visual link between the product and the personal motives of a child. If a preschooler wants to draw a valentine for his mother, then making a valentine should be a sufficient way to express his feelings. To make a child rethink the idea, express himself in it, the teacher might ask: "Where is it seen in your valentine that you like your mother?" Or "How would your mother guess from this picture that you love her?" The important point is that meanings are always different, and every child's idea is valuable and unique; a teacher should strongly emphasize this point.

After all the ideas are presented, the children need to choose one that will be turned into a product of the creative project. Each child is given one chip; they "vote" with it by putting it on the picture that, from their point of view, expresses the most interesting idea. The teacher needs to explain that they cannot put a chip on their own drawings; they need to give it to another.

When the idea is selected, the method of its realization is discussed and plans for actions are made. Parents can participate in the project, but they should not substitute their activity for their child's.

The creative project concludes with presenting the product and receiving feedback.

Lessons learned from creative projects. Creative project activity is unique in representing and embracing a child's interests. By supporting children's projects, grown-ups support their unique outlook, stimulate their cognitive and creative activity, and help their cognition to develop by widening the space of possibilities through project-related peer discussions. In addition, project activity gives a child an experience of competitive interaction, which teaches that an idea has to have value to others, not only to oneself — a prerequisite for successful communication.

Through regular participation in creative project activity beginning from 5 years of age children develop the habit of using the obtained skills in different situations. For example, in one kindergarten children proposed a project aimed at organizing their winter activities; they had to decide what to build in winter on their playground and what games to play. In another kindergarten children proposed turning an empty corner of their room into a display site. They discussed what should be displayed there (schemes for upcoming projects, best drawings), created a blueprint, and agreed on constructing it.

Normative projects

A normative project is aimed at creating new rules of behavior in a given situation. Mastering the rules plays a crucial role in child development. However, most rules are presented to children as something they must learn and do. This is an area in which the child's activity may be manifested in the least degree, and often the only way of expressing oneself is to violate the rules. Implementation of a normative project allows a child to take a fresh look at a situation with a particular rule and to regard it as a space of possibilities.

A normative project has several features. First, it is always initiated by a teacher. Second, it must be based on actual problem situations related to relationships with-

in a group of children or between adults and the children. Third, a teacher must be prepared to guarantee that a new rule developed and adopted by the children will become really effective and will govern the behavior of all participants in the situation, including the adults.

Stages. In the first stage, the children and the teacher describe a problematic situation of interaction or a violation of the rules. The children express their vision of the problem and acknowledge the fact that such a problem exists.

The second stage explores the space of possibilities of the situation. The teacher and the children offer a variety of possible behaviors (both imaginary ones and ones from their experience) and discuss the possible undesirable consequences. In tense situations, children need to present the undesirable consequences that they discovered during the discussion in drawings (symbolic form) and then show them to the group.

The third stage brings children back to group discussion, but this time the emphasis is on behavior that can help to prevent undesirable consequences. The children may offer a variety of possibilities, which are summarized by the teacher and then drawn by the children.

During the fourth stage, the children talk about their drawings and the rules of behavior that seems to them most appropriate. After seeing all the pictures, the children have to choose one general rule that they will follow in such situations and present it in the form of a sign proposed by the author of the rule. The sign should have two components: an indication of the situation and a representation of the correct way of acting in that situation.

Such work is carried out every time a new rule is needed. In this way, a book of rules is created in which children draw signs and teachers formulate and write the text of the rules. This book is in an accessible place and can be used by the children if necessary. A normative project cannot resolve all conflict situations, but the book serves as a tool for regulation of the behavior of the children. They start turning to it for advice and may add to it if necessary.

Let's consider an example of a normative project from one kindergarten. The teacher describes a problematic situation. The children are divided into two groups, and one of the groups is in a playroom; when the time comes to go to class, the children leave the game of constructing buildings unfinished. At that time the second group of children comes to the room and starts playing. When the first group returns, they discover that their buildings are destroyed or that another game is going on. This causes tears, aggression, and bewilderment. It was easy for these feelings, caused by undesirable interference in a game, to arise. Almost all the children experienced the destruction of their buildings at least once. But resolution of the problem took a much longer time. As a result of group work three signs, repeating the principle of the operation of traffic lights, were invented: a green circle near a game meant "Play what you want"; a yellow circle warned, "You can play, but you cannot change anything"; and a red circle prevented any newcomer from playing with already initiated and temporarily abandoned games. Now the regulation of relations between the two groups was in the hands of the children, who made their own decisions about whether anyone could intervene in their game and made sure that other children did not violate this rule.

Lessons learned from normative projects. The value of normative project activity is that it resolves real conflicts and is a tangible way to support children's initiatives. A normative project allows children to work on their experience of emotionally charged situations and to create constructive ways of resolving them. This type of project allows preschoolers to gain invaluable experience in self-control, which is one of the major components of readiness for school.

Results of the implementation of project activity

Teachers

As noted by Barron et al. (1998), project activity requires simultaneous changes in curriculum, instruction, and assessment practices. The first three months of our study showed that implementation of project activity completely changes the work of preschool teachers; it modifies their interactions with colleagues and children on the basis of the teachers' increased reflection on their professional activities. A group of creative preschool teachers was formed, in which they discussed their class notes, experiences, and materials obtained by video recording. Not all the teachers were willing to accept the change: 5 of the 23 preschool teachers refused to incorporate any project activities in their work. However, 8 teachers actively introduced project activity into the everyday life of their kindergartens for 2 years. They admitted in interviews that project activity demands more time, more deliberation, active listening, and a desire to help children express themselves and take the initiative. Despite the frequent need for after-hours work, those teachers managed to get their colleagues from the neighboring kindergartens interested in project activity.

Parents

As we mentioned before, the successful realization of children's projects is impossible without the support of their parents. The degree of parental involvement, based on our experience, depends not so much on the activity of the preschool as on the activity of the children. Parents were excited to notice their children's new initiatives at home: the children started to come up with ideas about what to do together at home, often involving neighbors and other people, and they became more inquisitive and overall more interesting to their parents. Teachers began to hear increasingly in parental meetings the phrases "I didn't know my child is so bright" and "I had no idea that this interests my child." We have seen that parents' participation in the project activity of their children makes little victories over the routine of their everyday life happen.

Children

As we noted, we used project activity to work with gifted children. They were selected on the basis of recommendations for the identification of intellectually gifted children of preschool age (Diachenko et al., 1996). These recommendations establish criteria for selecting gifted children based on the results of a se-

ries of tests. Also, children with a normal level of cognitive development were enrolled in the groups along with the gifted. Ultimately 2 groups were formed, each including gifted children (9 and 10 children, respectively) and children with a normal level of cognitive development (16 and 15 children, respectively). The experimental group differed from the control group in one respect: 50% of its class time was devoted to project activity. Project activity was completely absent in the control group.

The experiment lasted for the 2 years before the children started school. There were clear differences between the nature of participation in project activities for gifted children and children with normal levels of development: the gifted children were more active and participated more in group projects. At the end of the second year results obtained from the same tests (Diachenko et al., 1996) showed that children from the experimental group performed better than children from the control group (Veraksa & Bulicheva, 2003). The indicators of cognitive development for the gifted children within the experimental group changed only slightly, but the indicators for the children with normal levels of cognitive development in the experimental group improved significantly compared with the results for those in the control group. The experimental results allowed us to assert that project activity can be an effective technique for working not only with intellectually gifted preschool children but also with normally developing preschool children.

The children in both the experimental and the control groups graduated from kindergarten and were enrolled in different schools. Habok (2015) notes that children who experience learning through project activity tend to show interest in learning after the projects are over. We wanted to find out how those children's participation in project activity in kindergarten affected their academic performance in school. Would they be able to save and develop their individuality in a new situation? In 2012, 12 children from the experimental group and none of the children from the control group passed all their final school exams with excellence. We believe that these numbers speak for themselves.

Conclusion

Project activity is extremely popular worldwide and is actively used by practitioners in the field of preschool education. Historically in Russia the idea of project activity became known through the work of J. Dewey (1916/2009) and W. Kilpatrick (1918). The core of the technique was the independent action of children in the process of learning. A key achievement of the children was the ability to plan their own actions and to obtain the planned result. Beginning from Vygotsky's (1978) cultural-historical theory and Venger's (1988) understanding of giftedness, we turned to this technique as a cultural way of implementing activity for intellectually gifted children. However, in our work we found that for the gifted child exploring the space of possibilities (which is not described in the standard project-activity approach) not only is of great interest but is of great value. Furthermore, the results of the first experiment have shown the effectiveness of our modification in work with normally developing children.

We believe that the proposed modification of the project-activity technique promotes understanding of the subjectivity of the child: if in the traditional version of project activity children were considered to possess subjectivity because they could do projects by themselves, now they have to accomplish another task to possess subjectivity: they have to do projects that express their own feelings and their attitude toward the world. Exploration of a situation's space of possibilities is not simply absorption of proposed adult content; it makes the child see the design of the content and the history of its formation. Experience with project activity gradually leads children to understand that they are capable of making their own contributions to cultural content and of improving or changing it.

Acknowledgments

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PSYCHOLOGY OF PERSONALITY

An existential criterion for normal and abnormal personality in the works of Erich Fromm

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This is the first of four articles scheduled for publication in this journal on the position people with normal and abnormal personalities take in regard to so-called existential dichotomies. The main objective of this article is to propose a new, existential criterion for normal and abnormal personality implicitly present in the works of Erich Fromm. According to this criterion, normal and abnormal personalities are determined, first, by special features of the content of their position regarding existential dichotomies, and, second, by particular aspects of the formation of this position. Such dichotomies, entitatively existent in all human life, are inherent, two-alternative contradictions. The position of a normal personality in its content orients one toward a contradictious predetermination of life in the form of existential dichotomies and the necessity of searching for compromise in resolving these dichotomies. This position is created on a rational basis with the person's active participation. The position of an abnormal personality in its content subjectively denies a contradictious predetermination of life in the form of existential dichotomies and orients one toward a consistent, noncompetitive, and, as a consequence, one-sided way of life that doesn't include self-determination. This position is imposed by other people on an irrational basis. Abnormal personality interpreted like this is one of the most important factors influencing the development of various kinds of psychological problems and mental disorders — primarily, neurosis. In the following three articles it will be shown that this criterion is also implicitly present in the theories of personality devised by Sigmund Freud, Alfred Adler, Carl Jung, Carl Rogers, and Viktor Frankl.

Keywords: human nature, human essence, existential dichotomy, normal personality, abnormal personality

Introduction

The problem of normal and abnormal personality is one of the most important fundamental scientific problems of psychology; solving this problem is essential for success in performing a whole range of tasks in applied psychological science as well as in psychological practice. The most important of these tasks, which is related to the life of every human being, is that of designing a scientifically based system of values and practical recommendations in order to rear a normal personality. An equally important task is applying the criteria for normal and abnormal personality in diagnostics of personality development in children of different ages and in the selection and evaluation of staff working with people in clinical practice. Knowledge about normal and abnormal personality is essential for providing competent help, especially in psychotherapy and psychological counseling.

Despite its relevance, the problem of normality and abnormality of personality has not yet received any satisfactory solution. It has already become a tradition to refer to the most popular criteria for normality and abnormality (the key criteria are listed in Table 1) and to subject them to well-grounded criticism (Baron, 1995; Bratus, 1988; Carlson & Buskist, 1997; Coon, 1995; Davison & Neale, 1994; Halgin & Whitbourne, 2010; Mahoney, 1980; Perre & Baumann, 2012; Sarason & Sarason, 1989). Here I depart from this tradition and do not repeat these critical judgments, which are convincing and well known.

Table 1. Main criteria for normality and abnormality discussed in psychology

Criterion	Normality	Abnormality
Statistical	Matching arithmetic mean	Deviation from arithmetic mean
Culturological	Matching common norms and rules	Disagreement with common norms and rules
Adaptational	Adaptation to life in society	Social maladjustment
Clinical	Absence of psychiatric disease	Presence of psychiatric disease
Subjective	Absence of complaints of feeling unwell	Feeling unwell (distress)

Objectives

This is the first of four articles scheduled for publication in this journal. The main objective here is to propose a new, existential criterion based on the works of Fromm. In the following articles I will show that this criterion is also implicitly present in the theories of personality devised by S. Freud, A. Adler, C. Jung, C. Rogers, and V. Frankl.

Theoretical discussion

A specific feature of Fromm's approach to the problem of normal and abnormal personality is that initially the question was raised and resolved in the wider context of philosophical ethical problems. From his point of view, one significant branch of ethics that is closely related to this problem can be distinguished: he calls it humanistic ethics. A specific characteristic of this branch is unraveled by Fromm: its opposition to authoritarian ethics. This opposition is based on two criteria, a formal one and a substantive one.

A formal difference between these two branches lies in their completely opposite solutions to the problem of who should set a system of values that humans have to adhere to during their whole life and how this can be done. From the point of view of authoritarian ethics, a human being is incapable of possessing knowledge of good and evil. For this reason, the system of values should, first, originate from a certain external source and, second, be imposed on humans apart from their own will and mind. It rests on an irrational basis: on the desires and emotions that human beings experience in regard to this external source; because of these desires and emotions, the source acquires power over human beings and the ability to control their behavior. In comparison, humanistic ethics recognizes humans' ability to possess knowledge of good and evil and, consequently, also recognizes their right to choose their life values by themselves, guided not by irrational feelings but by their experience and reason.

A substantive difference between these branches lies in their different understandings of the purpose of a value system in human life. In authoritarian ethics it has as a purpose control over human behavior in the interests of persons or organizations that are external to the human being and impose certain values. In humanistic ethics the purpose of a value system is to organize and guide human life in one's own interests.

Fromm distinguishes two major lines in humanistic ethics: subjective and objective; these lines differ in their understanding of human interests. Followers of the subjective line argue that humans' own interests are subjective and individual and that they consist of satisfaction of their wishes. In other words, every human being decides which wishes to satisfy, and the satisfaction of these wishes is the main purpose and value of human life. In comparison, from the point of view of the objective line, there are life interests that are objective and universal for all humans without exception, and their implementation should be the ultimate goal and value of each human life. Fromm's answer to the question of what are objective and universal life interests is given in one phrase: to live and to be alive. These words should by no means be interpreted and explained according to our ordinary notion of life and death, in which life is seen as a certain limited period of human existence from birth to death. According to the philosophy of objective humanistic ethics, to live and to be alive means living one's life according to one's own nature.

Within the context of objective humanistic ethics, if living one's own life in accordance with human nature is a supreme objective and universal value for a human, the result is an adequate understanding of good and evil: whatever facilitates

implementation of human nature in one's life is good, and everything that impedes it is evil. As Fromm puts it, "Good in humanistic ethics is the affirmation of life, the unfolding of man's powers. Virtue is responsibility toward his own existence. Evil constitutes the crippling of man's powers; vice is irresponsibility towards himself. … The aim of human life is the growth and development of man in terms of his nature and constitution" (1947, pp. 20–29).

These philosophical ideas, developed within the framework of objective humanistic ethics, became the basis of Fromm's theoretical conceptualization of productive and nonproductive personality. The most general definition of a productive personality is the following: a productive personality is a type of individuality that contributes to living life according to the human essence.[1] In contrast, a nonproductive personality is a type of individuality that impedes implementation of the human essence in one's life. This counterproductive development of personality results in the transformation of a human into a different creature, one that is not completely a human.

Considering that, from the point of view of objective humanistic ethics, the way of life of the productive personality is the norm, a productive personality can be considered a normal personality, and a nonproductive personality, one differing from the norm, an abnormal one.

These general theoretical concepts of productive and nonproductive personality, in which the concept of human essence is the core, were developed by Fromm in a more detailed way in relation to two key questions: What are essential human characteristics? What are the types of individuality of productive and nonproductive personalities?

In his works Fromm gives two descriptions of essential human characteristics that are closely related to each other. The first essential characteristic is the so-called disharmony of human life. According to Fromm, the fundamental reason for this disharmony is the absence of instincts that could provide a human adap-

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[1]   As philosophers P. S. Gurevich and I. T. Frolov put it, the concept of human essence should be distinguished from the concept of human nature. From their point of view, human nature is characterized by "steady unvaried features, common markings and properties, showing its particular features of a living creature, which are innate for Homo sapiens in all times irrespective of biological evolution and historical process. To disclose these features means to express human nature" (Gurevich & Frolov, 1991, p. 3). Among these attributes there is a "superior, sovereign human quality. To unravel this quality means to comprehend the essence of the human" (p. 4). In such an interpretation the concept of human essence (from the logical point of view) is narrow compared with the concept of human nature. According to the distinction made by these authors, the concept of human essence may be defined as an assembly of one's most substantial human characteristics, by which one is validated — that is, due to which one is a human and not any other creature. This definition means that if we imagine a creature that may have all the characteristics typical for a human being except for substantial ones, such a creature can be characterized as anthropomorphic only — that is, such a creature resembles a human but is not a human in the precise meaning of that word. Despite the differences between the concepts of human nature and human essence described by Gurevich and Frolov, we have to agree with them that in the literature these concepts are used in similar ways — they fully coincide in scope. In the works of Fromm, among others, the term *human nature* is used mainly to mean *human essence*. Thus I make certain adjustments to Fromm's terminology so that from now on these two different terms are used according to their precise meanings.

tation to the environment and a genesis of mind. Because of the absence of instincts, a human being, who is a part of nature, becomes biologically maladapted to life in the natural environment. Because of one's mind, one discovers the problematic character of life conditions and faces a number of so-called dichotomies. The term *dichotomy* is used by Fromm to specify two-alternative contradictions, objectively existent in human life, that appear as problems craving solution. In his opinion, two kinds of dichotomies can be differentiated: the existential and the historical.

Existential dichotomies are intrinsic to the nature of human life, which is emphasized by the term *existential.* Consequently, they are objectively inherent. Because, from Fromm's point of view, they characterize not just human nature but the very essence of it, we may say that humans in their essence are destined to live with existential dichotomies. Among the examples of an existential dichotomy, Fromm uses one often: the dichotomy of life and death; this dichotomy appears as a result of human consciousness of the fact that one's existence has a finite character. It lies in the objectively existent contradiction between the natural human wish to live eternally and the realization of the meaninglessness of life in front of future death.

Historical dichotomies, unlike existential ones, are not essential to human nature, although they are also present in human life. Their content is specific for every historical period of social development; they are created by humans themselves and for this reason can be eliminated by them.

Therefore the main content of the concept of the disharmony of human existence as an essential characteristic of human beings is the fact that human life is not fully determined or set or programmed in advance. It is possible to speak about the predetermination of human life only in the sense that life is set as a problem, as a row of existential dichotomies: entitatively existent in human life are two-alternative contradictions that require solution. Fromm emphasizes that "man is the only animal for whom his own existence is a problem which he has to solve and from which he cannot escape" (1947, pp. 39–40).

The second essential human characteristic is that humans are free creatures. In other words, self-determination is necessarily present in human life, which is problematic and, due to this, uncertain.

It is obvious that these two essential human characteristics are closely related to each other and cannot exist without each other because a human can be free and manifest freedom only when life is neither set nor determined by anyone or anything. Thus, from Fromm's point of view, to be a human in itself means to exist relying on oneself, to make independent decisions in solving existential dichotomies, to base oneself on one's own experience and reason, and not to allow any, in his terms, heteronomous influences — that is, influences that control one's consciousness and behavior externally.

Discussion about Fromm's representation of the types of individuality of productive and nonproductive personalities should begin with his notion of the main driving force of personality development. This driving force is a human need for harmonizing one's life, a need for a noncontradictory, noncompetitive existence.

This need inevitably appears as a human reaction to objective disharmony and uncertainty regarding the very essence of one's life. It provokes humans to develop general representations of the world and of themselves that contain univocal solutions to the numerous existential and historical dichotomies they face in life and that consequently tell them how they should and shouldn't live. If these representations are able to show ways of solving contradictions, to prescribe how to act in certain problem situations, they are naturally taking the function of harmonizing life. A particular feature of these common representations is that they are not just cognitive representations but are also representations that humans believe to be true.

Fromm calls these general representations of the world and the human place in it schemes of orientation and worship because, on the one hand, they guide human beings in resolving contradictions on the cognitive side, and, on the other hand, they are the objects of faith and, consequently, have power over behavior. Examples of such schemes of orientation and worship are various religious, philosophical, ideological, and scientific movements; systems of moral values; and rules and norms of behavior accepted in different classes, social strata, and groups. Because of human belief in the accuracy of these representations, they are used as a guideline for certain actions; they lead and control human behavior just as instinctive mechanisms lead and control animal behavior. As a result, human life achieves certainty and direction, and human behavior acquires features of consistency and steadiness.

In real life one may see many schemes of orientation and worship; they vary in content, and it is almost impossible to make a full list of them. It is important to emphasize that humans, being more or less free in choosing these schemes, cannot avoid them because their need to have them derives from their essence: "Man is not free to choose between having or not having 'ideals,' but he is free to choose between different kinds of ideals" (Fromm, 1947, p. 49).

According to Fromm, schemes of orientation and worship form the basis of human character, which mainly determines whether one's personality is productive or nonproductive. The character of a productive personality is based on productive schemes of orientation and worship; the character of a nonproductive personality is based on nonproductive ones. These types of characters determine different ways of living, which are classified as oriented toward being or toward having. Orientation toward being is seen among productive personalities; orientation toward having, among nonproductive ones. These two types of characters and the corresponding ways of life should be regarded as ideal types; they cannot be seen in reality. Both of them are found in each human, but in different proportions, so that some people have a dominant productive type of character, some have a dominant nonproductive type.

The specific character of productive and nonproductive schemes of orientation and worship, which are, as has already been mentioned, the basis of human character, can be described using two main characteristics related to the content and the special aspects of the formation of these schemes. To begin with nonproductive schemes, a substantive characteristic of them is that they objectively deny a contradictious predetermination of human life in the form of objectively existing and

inherent existential dichotomies, thereby orienting a human toward a consistent, noncompetitive, and, as a consequence, one-sided way of life.

A distinctive feature of the formation of nonproductive schemes is that they are imposed by others, based on the desires and feelings that one experiences in relation to them — that is, on an irrational basis. Hence nonproductive schemes are not a result of human self-determination.

Thus, nonproductive schemes of orientation and worship do not correspond to the human essence, and they prevent humans from living in accordance with it. In the opinion of Fromm, the main characteristic of the way of life of a human with a nonproductive orientation is the performance of so-called nonproductive, or alienated, activity in all spheres of that person's life. Characterizing this activity, Fromm remarks that "in alienated activity *I* do not really act; I am *acted upon* by external or internal forces. I have become separated from the result of my activity" (1977, p. 74).

Nonproductive activity characterizes subtle nuances of human life that are difficult to understand and require additional special explanations. For this purpose we may use an example by Fromm in which nonproductive activity is shown on the material of so-called posthypnotic human behavior.

> Here is the subject A, whom the hypnotist B puts into hypnotic sleep, and suggests to him that after awaking from the hypnotic sleep he will want to read a manuscript, which he will believe he has brought with him, that he will seek it and not find it, that he will then believe that another person, C, has stolen it, that he will get very angry at C. He is also told that he will forget that all this was a suggestion given to him during the hypnotic sleep. It must be added that C is a person towards whom the subject has never felt any anger and, according to the circumstances, has no reason to feel angry; furthermore, that he actually has not brought any manuscript with him.
>
> What happens? A awakes and, after a short conversation about some topic, says, "Incidentally, this reminds me of something I have written in my manuscript. I shall read it to you." He looks around, does not find it, and then turns to C, suggesting that he may have taken it; getting more and more excited when C repudiates the suggestion, he eventually bursts into open anger and directly accuses C of having stolen the manuscript. He goes even further. He puts forward reasons which should make it plausible that C is the thief. (1942, p. 67)

In this example we should pay attention to an important characteristic of nonproductive activity: that the person does not recognize it as being external. Subject A is fully convinced that all the thoughts, feelings, images, wishes, and actions suggested by B belong to him personally. Moreover, if an external observer does not know about the preceding hypnotic suggestion, he, as well as A himself, is convinced that all these thoughts, feelings, images, wishes, and actions of A belong to him.

This example is illustrative for Fromm also because it models real human life precisely. Fromm is convinced that not only in the situation of hypnotic suggestion but also in conditions of everyday life many thoughts, feelings, wishes, and actions that one perceives as one's own and that are perceived so by others do not really be-

long to oneself but are imposed by an external source. Such external sources, performing the function of hypnotist in everyday life, are, first of all, parents and other near persons: relatives, friends, loved ones. Teachers, books, movies, media may also be external sources. Moreover, human personality itself and not only thoughts, feelings, images, wishes, and actions can have an external origin. Fromm calls such a personality a pseudo-self or pseudo-personality. A pseudo-self is formed by nonproductive schemes of orientation and worship imposed by other humans. If one identifies oneself with these schemes and perceives them as one's own, the result is alienation from oneself.[1]

Productive schemes of orientation and worship are fundamentally different from nonproductive schemes in content as well as in the way they are formed. A substantive characteristic of productive schemes is that they orient a human being toward contradictious outcomes of life in the form of existential dichotomies—that is, toward a way of life that is in accordance with its essence. People who have schemes of this type realize the disharmony in their existence: they realize that their life is neither determined nor set in advance, that they alone must search for and find a compromise in resolving numerous existential dichotomies. They do not deny but take into account the contradictive requirements of these dichotomies, relying on their own competence in doing so, and they perform productive, nonalienated activity in all spheres of life. According to Fromm, the concept of productive activity means that any form of human activity is initiated by oneself and not by heteronomous (external) sources that are controlling one's mind and behavior. Thus, such activity is not alienated from the human; on the contrary, the human is fully involved in it. According to Fromm, "Nonalienated activity is a process of giving birth to something, of producing something and remaining related to what I produce. This also implies that my activity is a manifestation of my powers, that I and my activity and the result of my activity are one. I call this nonalienated activity *productive activity*" (1977, p. 74).

Characterizing particular features of the formation of productive schemes, Fromm emphasizes that they are formed on a rational basis with the active participation of the person — that is, on the basis of knowledge originating from the person's own experience and reason. As a result, one's belief in the accuracy of productive schemes is based on one's own convictions. Fromm calls this type of belief rational, as distinct from irrational. According to him, "Irrational faith is a fanatic conviction in somebody or something, rooted in submission to a personal or impersonal irrational authority. Rational faith, in contrast, is a firm conviction, based on productive intellectual and emotional activity" (1947, p. 203).

A nonproductive personality, which leads to the transformation of a human into a different creature, which is not a human, is regarded by Fromm as one of the most important psychological prerequisites for developing various

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[1]   Fromm draws on the concept of alienation of Karl Marx, whose works he greatly appreciated, considering himself a convinced Marxist.

kinds of problems and mental disorders, especially neurosis. In his opinion, "Heteronomous interference with the child's and the later person's growth process is the deepest root of mental pathology, especially of destructiveness" (1977, p. 66).

Such an understanding of the psychological prerequisite for developing various kinds of problems and mental and behavioral disorders results in the main purpose of psychological help. This purpose is the revival of the specifically human in the human being or, as Fromm puts it, the healing of a person's soul. In practice the purpose is to help people realize the main reason for their psychological problems or diseases, which are rooted in their way of life and are related to the nonproductive orientation of their character. They are thus shown a way to solve their problems or to recover, which involves a radical change of character, and they can then turn to a new, productive way of life in accordance with the human essence.

Results

Fromm develops his theoretical understanding of personality based on the philosophical branch of so-called objective humanistic ethics, which proposes a certain idea of how a human should live. The ultimate moral imperative of a human, following what should be considered a standard of life, involves determining on a rational basis such values for oneself in order to facilitate living one's life in accordance with human nature.

Based on this school of thought, Fromm proposes his own theoretical concept of human nature, which has two essential characteristics. The first characteristic is that in human life there are existential dichotomies, which are inherent, two-alternative contradictions. They appear to a person as problems requiring solutions. The second characteristic is that a human being has self-determination.

The most important concepts in the works of Fromm are the productive personality and the nonproductive personality, which are characterized by particular features of content and formation of a position in relation to these two characteristics. Fromm defines this position as schemes of orientation and worship. If a position of a personality (a scheme of orientation or worship) in its content and in its way of being formed facilitates implementation of these two characteristics, such a personality is defined by Fromm as productive; if not, it is defined as nonproductive. Considering that from the point of view of objective humanistic ethics the way of life of a productive personality is a norm of human life because it corresponds to human nature, a productive personality can be defined as a normal personality, and a nonproductive personality, one differing from norms, as an abnormal one.

Given that according to Fromm the essence of human life is characterized by existential dichotomies and by self-determination, the position of a productive (normal) personality must be compromising in its content, matching the contradictive structure of human life in the form of existential dichotomies, and it must be created by oneself, based on one's own experiences and reason—that is, on a rational basis.

On the contrary, the position of a nonproductive (abnormal) personality denies the contradictive structure of human life in the form of existential dichotomies and orients the person toward a consistent, noncompetitive, and, as a consequence, one-sided way of life. A specific feature of this position is that it is imposed by others and is based on wishes and feelings; it thus has an irrational basis. From the point of view of Fromm, abnormality of personality interpreted like this is one of the most important factors influencing the development of various kinds of life problems and mental disorders, especially neurosis.

Given that in the works of Fromm the criterion for differentiating normality and abnormality of personality is specific feature of one's position in regard to existential dichotomies, I mark this criterion as existential.

Conclusion

In a compact manner the existential criterion can be illustrated by the three main differences shown in the Table 2, which are related to the content and the formation of a position that a person takes toward existential dichotomies.

Table 2. The existential criterion for normal and abnormal personality

	Characteristics of the position taken by a person toward existential dichotomies	
	Normal personality	**Abnormal personality**
Content of the position	*Compromising* Orients toward a contradictious predetermination of life in the form of existential dichotomies and the necessity of searching for compromise in resolving them	*One-sided* Orients towards a consistent, non-competitive, and, as a consequence, one-sided way of life, denying the contradictious predetermination of human life in the form of existential dichotomies
Formation of the position	*Own* Result of self-determination	*Imposed* Formed by others
	Rational Based on own experience and reason	*Irrational* Based on wishes and feelings

Application of the results

I have shown in a number of empirical studies (Kapustin, 2014, 2015a, 2015b, 2015c) that the key factor leading to child-parent problems in families of psychological-consultation clients is the abnormality of the parents' personality, identified through the existential criterion, which is displayed in their parenting styles. These parenting styles contribute to the formation of children with abnormal personality types, also identified through the existential criterion. These abnormal personality types are designated as "oriented on external help," "oriented on compliance of one's own behavior with other people's requirements," and "oriented on protest

against compliance of one's own behavior with other peoples' requirements." Children with such personality types are faced with requirements from their closest social environment that are appropriate for children with normal personal development but are not appropriate for children with abnormal abilities, and so they start having problems. As these problems are connected with troubles of adjustment to social-environment requirements, they can be classified as problems of social adaptation. There is a similarity between a personality type "oriented on compliance of one's own behavior with other people's requirements" and theoretical concepts in the work of Fromm, Freud, Adler, Jung, Rogers, and Frankl about people with abnormal personalities being predisposed to the emergence of various psychological problems and mental disorders. This fact suggests that a personality of this type can be regarded as a classic type of personality, which all these authors faced in their psychotherapeutic practice at different times.

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Formation of personality psychological maturity and adulthood crises

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Based on theoretical analysis, in the present paper, we defined the structure of the characteristics of personality psychological maturity, which is considered an adult development criterion. The objective of this paper was to identify the mechanisms that contribute to the formation of psychological maturity in adulthood development. We first assumed that one of the possible mechanisms is the normative crisis of development. In turn, previously formed psychological maturity traits can relieve the experiences associated with this normative crisis. The aim of the present study was to analyze the formation of psychological maturity during periods of emerging and middle adulthood, with a specific focus on normative crisis experiences. The study design included cross-sectional and longitudinal methods. The participants included 309 adults. The emerging adulthood group ranged in age from 18 to 25 years, and the participants in the middle adulthood group were between 38 and 45 years of age. To study crisis events and experiences, we used three author-designed questionnaires. A self-actualization test by E. Shostrom (SAT), the Big Five personality test by Costa and MacCrae, a value and availability ratio in various vital spheres technique by E.B. Fantalova, a purpose-in-life test by D.A. Leontiev, and a coping test by Lazarus were used to define the personality characteristics used to overcome difficult life situations.

In this paper, we described experiences specific to the crises associated with emerging adulthood and middle adulthood in the context of developmental tasks. Using cluster analysis, we defined groups with different intensities of crisis experiences and analyzed psychological content of crisis experiences in different groups. Using ANOVA, we found that participants with low intensity crisis experiences show more developed characteristics of psychological maturity. During emerging adulthood, the overcoming of crises associated with the separation from family contributes to the formation of such aspects of psychological maturity as self-management, life organization and responsibility. In a longitudinal study of midlife crises, the data suggest that in groups where there are more intense crisis experiences, there are more significant dynamics in the meaning and value sphere over the course of a year that lead to the achievement of greater personal integrity and congruence.

The current study proved the hypothesis regarding the role of the crisis mechanism of psychological maturity development in two phases of adulthood. It also proved that psychological maturity contributes to a decrease in the intensity of crisis experiences.

Keywords: development, adulthood, psychological maturity, crisis, crisis experiences, meaning and value sphere

Introduction

Adulthood is the largest developmental period of a human lifespan. It includes the transition to a profession, the development of social and professional roles, the building of an active professional life, the formation of a family and the raising of children. Additionally, this period is associated with mentoring, wisdom, intergenerational relationships and the dismissal from or ending of one's professional life. An understanding of the developmental principals, factors and characteristics involved in personality formation during different periods of adulthood is crucial for the development of social and psychological career development programs, family support programs, and psychological counseling and for the understanding of the mechanisms of human development. In our study, we assumed that psychological maturity could be one of the phenomena that indicate adult personality development (Golovey, 2012a). There are current studies that have attempted to identify the psychological content associated with the notion of adult personality development (Sukhobskaja (2002), Sergienko (2007), Nartova-Bochaver (2007), Kharlamenkova (2007)). In approaching this concept, the authors discuss the main characteristics of psychological maturity, noting the complexity and ambiguity of the definition of maturity in general and personality maturity in particular (Portnova, 2008; Shlyapnikova, 2010). Researchers have attempted to define the content of this concept in the context of personality potential such that personality potential is considered a characteristic of personality maturity (Leontiev, 2011). Some researchers have assumed that the main criterion of psychological maturity is personality self-determination, i.e., the ability to act in relative freedom of the given conditions (both external and internal) or in spite of the conditions (Abulkhanova-Slavskaya, 1999; Leontiev, 2011; Sergienko, 2007). Consistent with other researchers, we consider the psychological maturity of personality to be a complex phenomenon consisting of several criteria.

By analyzing existing approaches, we found a lack of clarity with respect to the definitions of psychological maturity and its criteria. Thus, we aimed to determine the most universal and significant characteristics to operationalize this phenomenon. From a generalized perspective, psychological maturity could be considered as the integration of two aspects: individual psychological (intrapersonal) and social psychological (interpersonal). Based on theoretical analysis, most recognized criteria of the psychological maturity of personality are represented below (Dermanova, Manukyan, 2012):

1. *Responsibility* (E. Fromm, E. Ericson, A.A. Rean, A.G. Asmolov, C. Rogers, S.K. Nartova-Bochaver).
2. *Reflexiveness, awareness* (G. Allport, A. Maslow, C. Rogers, N.E. Kharlamenkova, K.A. Abulkhanova-Slavskaya, R.M. Shamionov, G.S. Sukhobskaya).
3. *Self-development* (A. Maslow, C. Rogers, A.A. Rean, K.A. Abulkhanova-Slavskaya, A.L. Zhuravlev).
4. *Self-acceptance and self-respect* (G. Allport, C. Rogers, N.E. Kharlamenkova, R. Kassel).
5. *Autonomy* (C. Rogers, F. Perls, L.I. Bozhovich, J. Loevinger, S.K. Nartova-Bochaver, D.A. Leontiev).
6. *Viability* (B.G. Ananiev, C. Rogers, G. Allport, D.A. Leontiev).

7. *Self-management and life organization* (B.G. Ananiev, E.F. Rybalko, G.S. Su-khobskaya, A.G. Asmolov, K.A. Abulkhanova-Slavskaya, R.M. Shamionov).

8. *Integrity and congruence* (C. Rogers, B.G. Ananiev, N.E. Kharlamenkova, J. Loevinger, C.G. Jung, E. Ericson).

9. *Width of social network* (G. Allport, B.G. Ananiev, D.A. Leontiev).

10. *Tolerance, moral consciousness, humanistic values* (G. Allport, A.A. Rean, G.S. Sukhobskaya, L. Kohlberg, A.A. Derkach, A.A. Bodalev, A.G. Asmolov, N.E. Kharlamenkova, A.L. Zhuravlev, R.M. Shamionov).

11. *Positive social relations* (H. Sullivan, G. Allport, Z. Freud, E. Fromm, E. Ericson, C. Rogers).

In the given classification, the first nine criteria characterize intrapersonal aspects of maturity, while the last two (10 and 11) constitute the interpersonal characteristics of psychological maturity.

It is noted that despite a wide discussion on the phenomenon of psychological maturity, the number of empirical studies that reveal factors, conditions and mechanisms of the formation of psychological maturity is insufficient. Few extant studies consider the formation of personality maturity during different periods of adulthood.

Therefore, it is extremely important to determine what mechanisms contribute to the personal growth, integrity and personal development of an adult whose personality remains psychologically underdeveloped. During adulthood, the role of development of such mechanisms as isolation and compensation increases as they provide self-development and self-actualization of personality. However, the process of personal development is quite dramatic, largely due to the impact of life crises, which are often the result of a psychological trauma. Comparing data on normative crises in adulthood with identified criteria of psychological maturity, we find specific characteristics associated with different crises that occur during adulthood. For example, the transition to adulthood begins with the crisis of emerging adulthood (Khukhlaeva 2002, Sheehy, 1999; Slobodchikov, Isayev, 2000; Krasilo, 2007; Arnett, 1997; Tanner, Arnett, 2009).

The essence of this crisis is associated with the transition to a new value-semantic community of adults that involves separation, individuation, self-actualization, awareness and acceptance of responsibility — these are the parameters that distinguish an adult from a child and an adolescent. Crises emerging during training in high school and the first stages of professional work (professional expectations crisis), in our opinion, should be considered as part of an overall adaptation process of emerging adulthood. The psychological formations of overcoming the crisis of emerging adulthood are defined by parameters of personality maturity such as autonomy, self-management, life organization and the ability to form close relationships.

In middle adulthood, there appear different types of crises, referred to as midlife crises, as they generally occur when the individual is in his/her 30s and 40s (Levinson, 1986; Sheehy, 1999; Hermans, Oles, 1999; Morgun, Tkachev, 1981; Slobodchikov, Isayev, 2000; Soldatova, 2007). According to most authors, the crisis of the 30th birthday marks the transition from youth to middle adulthood. Termed flourishing, this is when certain formations or characteristics in the personality

structure tend to appear. Such formations include self-acceptance of the present, an awareness of the value of being yourself, values and conscious choices regarding the direction of self-development (Soldatova, 2007). With respect to the criteria of personality maturity, psychological formations during the midlife crisis for those in their 30s are associated with a more complete acceptance of self, accompanied by a focus on self-development. The most important characteristics acquired during crises that occur for those in their 40s are congruence, integrity, increasing autonomy, consciousness and reflectivity (Hollis, 2008; Sheehy, 1999; Soldatova, 2007). A number of studies claim that responsibility is one of the major acquisitions during the middle adulthood crisis (Erikson, 1996; Muzdybaev, 1980). Some researchers (Jung, 1996; Slobodchikov, Isayev, 2000; Lukin, 2006) also note an increase in the awareness of belonging to the world, an awareness that can be manifested through such characteristics of personal maturity as tolerance, moral consciousness, humanistic values and diverse relations with the world.

Study design

Based on an analysis of specific tasks at different periods of adult development and the corresponding characteristics of the crises, hypotheses and aims of the empirical study were formulated.

Hypotheses: 1. Because the crisis mechanism is associated with the formation of new characteristics of personality, developmental crises can serve as the mechanisms for psychological maturity formation and adult personality development. 2. Previously formed qualities of psychological maturity may decrease the crisis experience and enable the individual to better cope with normative crises.

Aims: 1. To analyze the crises associated with various stages of adulthood as possible mechanisms that contribute to the development of the psychological maturity of adults. 2. To justify and empirically study the indicators of personality maturity in different periods of adulthood.

To approach these aims, we conducted two cycles of studies. The first cycle dealt with the study of adulthood crises in association with the characteristics of psychological maturity. The second cycle aimed to study the criteria and indicators of personality psychological maturity development during different periods of adulthood.

Empirical study on early adulthood crises and personality psychological maturity

Method

The sample for this study, which examined the psychological content of early adulthood crises with regard to the parameters of psychological maturity, included 266 students with varied profiles regarding training and education. To study the nature and severity of the crisis experiences, we used specially designed questionnaires — a questionnaire for the analysis of occupational choice and training and a questionnaire about crisis events and experiences, which was designed for students by V.R. Manukyan (Vasilenko, Manukyan, 2006).

The questionnaire for analysis of occupational choice and training consisted of 15 questions with several options and focused on information regarding factors of occupational choice, validity of occupational choice, existence of occupational plan, satisfaction with occupational choice, dynamics of attitudes toward profession during training, self-confidence regarding abilities during training. The questionnaire that addressed crisis events and experiences (for students) consisted of 24 statements that described particular experiences considered to be typical phenomenological characteristics of adulthood crises in general and emerging adulthood in particular. The characteristics included biographical crisis experiences, phenomenology of internal conflict and difficulties with self-determination, separation from family, onset of professional training and participation in professional activities (table 1 presents 15 of the 24 statements). The participants ranked the statements on a 10 point scale that ranged from 1 — minimal intensity of an experience to 10 — strong experience and where (0 denoted the absence of experience. For interpretation, statements are considered as a whole in correspondence with each other. In this way, the analysis allows for a more precise description of the phenomenological structure of the crisis, the definition of the crisis and the major and minor experiences.

To determine the personality factors and features that help to overcome difficult situations, we used the self-actualization test by E. Shostrom (SAT), the Big Five personality test by Costa and MacCrae and the coping test by R. Lazarus.

Table 1. Significant differences in terms of student crisis experiences between cluster groups

Events, experiences	M (pros)	M (cris)	F	p
1. Depreciation of past successes and their irrelevance at present time	2,31	5,11	67,35	0,00
2. Lack of significantly attractive future goals	2,46	**6,23**	111,26	0,00
3. Feelings of strong fatigue, lack of energy regarding activities	**4,01**	**6,76**	55,28	0,00
4. Ambiguity, unpredictability of the future	**4,11**	**7,40**	117,28	0,00
5. Difficulties in orientation in a complex flow of events	2,81	5,50	77,87	0,00
6. Difficulties in defining future development directions	3,47	**6,77**	107,37	0,00
7. Regrets about lost chances	**4,65**	**7,22**	48,68	0,00
8. Experiencing lack of meaning in life	2,85	6,06	76,69	0,00
9. Conflict between two equally important needs, goals	**4,06**	**6,20**	28,59	0,00
10. Questions regarding self-image ("who I am?", "whom would I like to be?" etc.)	3,83	**6,63**	59,20	0,00
11. Difficulties in distribution of time and power between different spheres of life (training, communication, vocation etc.)	5,17	**6,93**	25,158	0,00
12. Difficulties regarding the beginning of professional training (making conspectus and understanding lectures, independent work with sources)	2,37	5,14	81,84	0,00
13. Feelings of loneliness	3,17	**6,40**	82,75	0,00
14. Experiences of yearning for schoolmates, friends	1,96	3,82	32,11	0,00
15. Difficulties in communication with college mates	1,46	3,77	66,43	0,00

The study design was based on the principle of the allocation of the total sample of two groups, tentatively called "prosperous" (N = 155) and "crisis" (N = 111) (based on cluster analysis), and their comparison. The crisis group was characterized by a significantly higher level of crisis experiences (Table 1).

Results

The main experiences in both groups involve difficulties with time and energy management during different spheres of their lives (education, communication, recreation, work, etc.) as well as feelings of extreme fatigue. Such experiences reflect the difficulties and complexities associated with self-organization experienced by all students. For all students, biographical experiences, i.e., uncertainty and unpredictability of the future and regret about missed opportunities, are relevant, although to different degrees, and thus reflect the current process of an awareness of life during this stage. In the group with crisis experiences, these difficulties are combined with intense emotions regarding self-image, feelings of loneliness and difficulties determining the direction of their own development, thus indicating the relevance of their past experiences, as these experiences contributed to their development during their youth — a period of active personal and professional self-determination. In the relatively prosperous group, the structure of crisis experiences reveals the fullness of students' lives and their desire for self-realization.

Table 2. Significant differences in terms of personality characteristics between cluster groups

Characteristic	M (prosp)	M (cris)	F	p
Emotional stability (Big Five, IV)	47,64	53,16	19,64	0,000
Time competence (SAT)	52,59	41,58	23,66	0,000
Support (SAT)	55,39	51,32	11,36	0,001
Value orientation (SAT)	56,92	51,46	8,202	0,005
Flexibility (SAT)	56,70	52,3	5,097	0,025
Sensitivity (SAT)	57,27	52,4	5,500	0,02
Spontaneity (SAT)	56,94	52,26	5,889	0,016
Self-respect (SAT)	62,64	51,00	28,874	0,000
Self-acceptance (SAT)	18,52	13,23	4,868	0,028
Acceptance of aggression (SAT)	56,56	52,63	3,99	0,047

A comparative study between these two groups of personality characteristics (Table 2) enables us to characterize the prosperous group of students as significantly more emotionally stable, self-confident, calm, realistic and adaptable and thus better able to cope with difficulties (factor 4, emotional stability, of the Big Five). The values for this factor are in the range of medium for the prosperous group and high for the crisis group. The results indicate that those in the crisis group are emotionally unstable, impulsive, moody and unable to cope with reality. A correla-

tion of the psychological content associated with the emotional stability factor with our criteria of maturity suggests that this characteristic is one of the conditions for developing viability as an aspect of maturity.

Distinctions regarding the scales of the SAT reveal areas of internal resources among students from the prosperous group that are a result of their greater psychological maturity. Among the groups of students, significant distinctions are revealed on the nine scales of the self-actualization test ($0.000 \leq p \leq 0.047$), where parameters of psychological maturity, such as self-government and life organization (the "competence of time" scale); autonomy (the "support" scale); self-acceptance, self-esteem, awareness and reflectivity (the "sensitivity", "spontaneity", "acceptance of aggression" scales); and tolerance and humanistic values (the "valuable orientations" and "flexibility" scales), are revealed. Broad coverage of the revealed distinctions further indicate that the students from the prosperous group demonstrate more expressed characteristics of psychological maturity than do students from the crisis group. With respect to the students with expressed crisis experiences, lower indicators of psychological maturity and also the existence of the problems connected with the unsuccessful efforts to overcome the crisis from the previous period of development are characteristic.

Considering that one of the problems during the period of early adulthood is separation from a parental family, we studied the distinctions between the students living in a parental family (180 people) and those living separately from their parents (106 people). An ANOVA analysis was used (Table 3).

Table 3. Significant differences in terms of crisis experiences and personality characteristics among in-city and out-of-city students

Characteristic	M (SPb)	M (out-of-city)	F	p
Depreciation of past successes and their irrelevance at present time	3,13	4,10	6,29	0,013
Experiencing a lack of meaning in life	3,84	4,78	4,88	0,028
Experiencing loneliness	4,12	5,16	6,34	0,012
Difficulties communicating with college mates	2,18	2,85	4,27	0,04
Painful separation from family, support of close people and transition to self-support	1,68	4,05	45,39	0,000
Separation from childhood friends	2,62	3,60	6,77	0,01
Confidence about future	10,17	11,07	7,98	0,005
Living with parents or separately	3, 79	2,17	223,3	0,000
Self-control (Big Five)	50,74	55,49	23,01	0,000
Emotional stability (Big Five)	48,46	51,00	3,99	0,047
Self-control (Lazarus, %)	55,46	60,49	8,01	0,005
Distancing (Lazarus, %)	45,84	50,57	4,34	0,038
Accepting responsibility (Lazarus, %)	59,33	64,41	4,36	0,038
Planned problem-solving (Lazarus, %)	64,86	69, 65	4,81	0,029

The results reflect specific aspects of the crises experienced by students living separately. Such aspects include a significantly greater expression of difficulties associated with the social and psychological adaptation to the painful separation from family, the loss of support of close people and the transition to self-support; difficulties communicating with classmates; difficulties adjusting to the separation from childhood friends; and feelings of loneliness ($0.000 \leq p \leq 0.04$).

Furthermore, students living separately are more inclined to depreciate their latest progress because in the new environment, it is irrelevant as they must now develop new abilities, make new friends, and rebuild their image anew. Accordingly, these students endure a sharper transition into emerging adulthood, which is also supported by significantly more intense experiences of an existential vacuum. For such students, entering higher education institutions is the central phase of the separation from parental families, which is reflected in the nature of their experiences, in their personal characteristics and in their coping behaviors.

ANOVA results reveal that students living separately from their parental families are more inclined to take responsibility and that they exhibit significantly more coping strategies, better self-control and better problem-solving skills. The expression of significant coping strategies reflects the great intensity of the course of their crises. The maximum divergence between the groups, based on the values $F=23.01$ and $p=0.000$, is specific to the strategy of self-control, which is characterized by significantly higher levels in combination with self-control over behavior as a personal quality, according to the Big Five. At the same time, the emotional stability of the students living separately from their parental families is low, i.e., they attempt "to seize their emotionality" in an attempt to suppress or control it. As the quantity of difficulties endured is possibly too great, they may be compelled to separate or distance themselves from some of the problems. The results reveal that students who are living separate from their families develop the ability to self-check their behaviors, are inclined to accept responsibility and search for reasons or causes for their failures. On this basis, we conclude that overcoming the crisis of separation from a parental family likely promotes the formation of certain aspects of personality psychological maturity, such as self-government and life organization skills as well as a sense of responsibility.

Empirical study on middle adulthood crises and personality psychological maturity

Method

In the studies conducted previously, we obtained data, with respect to the valuable and semantic sphere, on midlife transformations occurring in the valuable and semantic sphere such as the development of greater tolerance and humanistic values. It has been found that during the period of middle adulthood, personal characteristics that correspond to the parameters of personality psychological maturity have a regulating impact on the experiences associated with the aging crises. These characteristics include responsibility, self-acceptance, life organization skills and social relationships (Manukyan, 2009). As individuals approach their 40s, per-

sonality changes such as increased awareness and reflectivity on their own life have been revealed (Golovey, Manukyan, 2003).

Proceeding from these data, we concentrated the research on the analysis of the dynamics of the valuable and semantic in connection with the experiences of midlife crises. A total of 43 people (13 men and 30 women) between the ages of 38 and 45 years participated in the research, though only 23 (14 women and 9 men) participated in the longitudinal study. The following techniques were used: a questionnaire on age-related changes, life orientations technique by D.A. Leontiev, a crisis experience questionnaire by V. R. Manukyan (Vasilenko, Manukyan, 2006), a technique to establish value and availability ratios for various vital spheres by E.B. Fantalova (Fantalova, 2001), a survey on the definition of the psychological content of perceivable age changes. The survey asked, "What changes are happening (or happened) to you with regards to your 40th birthday, and with what are the changes associated? Please describe what you have noted," Participants were offered 18 spheres in which they could reply to this question. In each sphere, they were to write their description in free form. Spheres with no changes were kept. The survey was analyzed using content analysis.

Results

The analysis of the entire selection revealed that from the 18 spheres, adults marked changes in an average of 10 spheres. The nature of the realized changes was depicted using content analysis, the results of which showed that the majority of respondents experienced health deterioration (61.29%), realized the transience of time (50%), and noted changes in appearance (53.13%). At the same time, there was an internal process of reconsideration, taking responsibility, summing up time lived, reorganizing the present and creating the future (44.44%). During this period, an interest in spheres such as nature (68%), art (56%) and religion (44.44%) increased. Moreover, there was an increase in understanding and tolerance with respect to the attitudes of other adults (46.43%) and children (37%). The data further reflect personal changes that include increased responsibility, greater tolerance in personal relations and an increase in social communications that extend beyond the limits of self and toward transcendence.

The correlation analysis of the interrelations among the indicators of the crisis, as well as the valuable and semantic sphere, revealed that experiences associated with midlife crises were accompanied by a disintegration in the motivation and personal spheres of adults following both conflict and vacuum type experiences (p≤0.01). When experiencing a midlife crisis, the most difficult spheres to recognize or adapt to are active life, love, freedom in behavior and actions and self-confidence.

A cluster analysis of the characteristics of crisis expressiveness revealed three groups that significantly differed on a number of indicators (0.000 ≤ p ≤ 0.05). Representatives of the crisis group (34.8%) were characterized by high values for overall crisis expressiveness, higher overall anxiety and a greater number of changes related to their 40th birthday. Compared with other groups, the crisis group also expressed the lowest scores for satisfaction with life and feelings of happiness. In this group, the highest levels of disintegration in the motivational and personal spheres were

also revealed. Participants in the middle group (47.8%) were characterized by average values for the majority of indicators. The safe group (17.4%) was found to have low scores for overall crisis expressiveness, general anxiety, and noted changes. Additionally, this group was characterized by a high level of satisfaction with life and a low level of disintegration in the motivational and personal spheres.

An analysis of the dynamics of the valuable and semantic sphere (assessed using the Wilcoxon test) suggests, for adults in the same crisis phase, changes occur within one year regarding the values of love and self-confidence (Table 4).

Table 4. Significant shifts in investigated characteristics (Wilcoxon criteria): results from a longitudinal study

Characteristic	M Time 1	Mean Time 2	Number "+ " rankings	Number "–" rankings	Z	Sign.
Significant shifts for group 1 with pronounced crisis experiences						
C5 (love)	9,25	7,38	1	6	−2,156	0,031
C8 (self-confidence)	6,5	4,88	0	6	−2,232	0,026
Significant shifts for group 2 with intermediate crisis experiences						
Number of changes	8,55	10,91	7	2	−2,257	0,024
Locus of control – life	29,27	32,73	9	2	−2,097	0,036
C5 (love)	8,73	8	1	7	−2,126	0,033
Significant shifts for group 3, "safe", without crisis experiences						
C7 (having real true friends)	4	6	4	0	−2,000	0,046

As noted previously, these values are the most difficult to realize, and the breakdown in these spheres closely correlates with experiences related to midlife crises. We further note that the changes in the group with pronounced crisis experiences are connected to the decrease in the importance of the specified values. That is, they are directed toward the smoothing of the internal conflict and an increase in integrity and congruence of the personality.

The shifts generally related to the valuable and semantic sphere were also found in adults with low levels of crisis experience expressiveness (intermediate group). Adults in this group also reinterpret the value of love in the direction of decreased importance. Representatives of this group began, within a year, to pay more attention to the changes they were experiencing, as indicated by the number of changes in connection with the 40th birthday, and at the same time, they began to believe they had the ability to manage their own life, as indicated by the locus of control — life, life-meaning orientations. In the third group of participants, where crises were not as prevalent, the shifts were minimal, which is characteristic of a stable period of development. However, a re-evaluation of the availability of good and loyal friends towards an increase in the importance of friends was observed in this group.

In general, this research indicates that shifts in valuable orientations are more characteristic for adults who enduring normative crises, and it empirically confirms the assumptions of the impact of the crisis mechanism of development on an adult's identity. In the crisis groups, changes aimed to reduce the significance of values in the fields most difficult to implement and in those most associated with the experiences of midlife crises. The changes aimed to reduce the gap between the desired and the available and to restore the integrity of the person, which generally reflects the positive nature of the changes.

Discussion

This study revealed a close relationship between the indicators of the psychological maturity of a personality and the character and timing of experiences related to age-specific crises. The crisis experiences are determined by developmental tasks and developmental situations, and thus, the crisis experiences of early adulthood differ from those of middle adulthood. Characteristics of life tasks solved by adults in early and middle adulthood as revealed in our study are consistent with other research (Khukhlaeva, 2002; Sheehy, 1999; Slobodchikov, Isaev, 2000; Krasilo 2007, Levinson, 1986; Morgun, Tkacheva, 1981; 2000; Soldatova, 2007).

A study of crisis symptoms found individual differences in the intensity of the experiences such that low-intensity crisis experiences are associated with more pronounced characteristics of psychological maturity. Thus, we assume that these low-intensity experiences are factors in preventing crisis development. This is evidenced both in the structure of students' experiences connected with life completeness and aspirations toward self-realization and in the overt expression of qualities associated with more mature personalities, particularly such qualities as self-government, life organization skills, autonomy, self-acceptance, self-esteem, sensibility, reflectivity, tolerance, humanistic values and resilience. As these parameters of personality psychological maturity started forming earlier, students can exploit these qualities as they have become internal resources. That being said, the development of these parameters is not yet completed.

Regardless of the degree of development of personal maturity, all young people have difficulty with self-organization, and they endure difficulties with time distribution and with conflicts between and among various spheres of life. Overcoming these difficulties leads to the development of various aspects of psychological maturity such as self-management and life organization. Young adulthood is the first time students are confronted with such problems and solutions, and thus, this parameter is specific to the period of early adulthood. The development of the self-management and life-organization parameter is most intense among those young people who are coping with the separation from their parental families and living separately from their parents. Thus, their crisis experiences are more pronounced.

Our studies on middle age maturity show that an impending 40th birthday is associated with such characteristics of psychological maturity as tolerance, moral consciousness and humanistic values. There is an increase in sensibility and reflectivity concerning one's life that is discerned by the individual him/herself. The respondents' marked personality changes reflect the ongoing transformation in

the direction of increased expressiveness of responsibility and in the expanding of relations with the world beyond the limits of self (art, religion, nature) and toward transcendence. Most dynamics were observed in groups with the highest crisis experiences in the value-semantic field, which empirically confirms the assumptions regarding the effect of the crisis mechanisms of development on the adult's identity.

Conclusion

Personality maturity is an ongoing developmental process that occurs throughout the stages studied herein. Moreover, we can assume that psychological maturity is formed only after transitioning through the crisis of middle age, a conclusion that is consistent with the concepts regarding development in adulthood (Ericson, 1996; Jung, 1996; Slobodchikov, Isaev, 2000; Lukina, 2006) and is also consistent with our previous research (Golovey, Manukyan, 2003; Golovey, 2012).

The results of this study suggest that during various stages of maturity, depending on specific problems of development, there is a primary formation of certain parameters of psychological maturity, while the already created parameters act as resources for overcoming difficult situations during the subsequent stage of development, which in turn results in successfully surmounting these new situations. The failure to overcome a crisis from the previous stage impedes the formation of mature personality traits, thus supporting the hypothesis about the relationship between crisis mechanisms and psychological maturity development. The results further reveal a continuity of crisis experiences during different periods of adulthood and indicate that difficult life situations, difficult tasks suggested by life and the process of overcoming these challenges contribute to the formation of psychological maturity and the successful resolution of normative developmental crises in adulthood.

Acknowledgments

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Neuropsychological findings in personality disorders: A.R. Luria's approach

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There is a lack of information concerning the features of cognitive processes in personality disorders, as well as the brain mechanisms of the pathogenesis of these diseases. Luria's neuropsychological approach demonstrated its heuristicity in estimating the cognitive status of patients with mental disorders and can be employed to identify the brain bases of non-psychotic mental disorders (including personality disorders).

The objective of this research is to study the features of neurocognitive functioning in patients with schizoid personality disorder and schizotypal personality disorder (against the norm), employing Luria's neuropsychological methodology. Hypotheses: 1) While both types of personality disorders are related to schizophrenia spectrum disorders, the specificity of the neurocognitive functioning of each personality disorder will be observed in addition to general neuropsychological signs. Specific neuropsychological symptoms point to different brain deficits, which allows conclusion to be drawn regarding differences in the pathogenesis of each personality disorder; and 2) Luria's methodology neuropsychology is adequate for the study of neurocognitive functioning in personality disorders.

The study was conducted using qualitative and quantitative analyses (according to Luria) of neuropsychological testing data in a group of fifty male patients aged 19,2±3,7 years with pathocharacteristic domain disorders. The group consisted of 30 schizoid personality disorder patients and 20 schizotypal personality disorder patients.

Statistically significant differences (p <0,005) in neurocognitive function (regulatory processes, memory, spatial function) between the healthy controls and patients with personality disorders were observed.

Specific cognitive disorders pointing to the dysfunction of front-thalamoparietal connections were characteristic of both groups. Lateral differences were discovered for both patient groups. The neuropsychological symptoms related to left hemisphere dysfunction were characteristic of the patients with schizotypal personality disorder. Neurocognitive deficits related to right hemisphere deficiency characterized the patients with schizoid personality disorder.

Keywords: neuropsychology, cognitive functions, personality disorders, cerebral mechanisms, pathogenesis

Introduction

The study of pathogenetic mechanisms of nonpsychotic adolescent age mental disorders is due to their high frequency, the considerable socio-economic burden placed on affective and neurotic states, drug addiction, behavior disorders, and suicide. Researchers pay special attention to the psychopathological, etiological, pathogenetic and therapeutic aspects of depressive states discovered at late adolescent and early mature ages (Kopeiko & Oleichik, 2007; Oleichik, 2011). The diffusion of affective pathology during adolescences varies from 13 to 40 percent according to various sources (Marceli, 1998; Kopeiko & Oleichik, 2007). Adolescent depression cases differ significantly from mood disorders, arising in a later age and exhibiting different clinical characteristics (Brodaty et al., 2005; Oleichik, 2011). These cases are specified by different psychosocial scars (Rohde, Lewinsohn, Seeley, 1994) associated with a greater number of comorbid mental disorders (Rohde, Lewinsohn & Seeley, 1991), and double the risk of emergence of addictive behaviors (Chilcoat & Breslau, 1998; Christie et al., 1988) and suicide (Balázs et al., 2013). However, only a third of patients seek help (Aalto-Setälä et al., 2002).

Cognitive disorders of one type or another attend almost all forms of mental pathology. Non-psychotic mental disorders (affective, neurotic and personality disorders) at an adolescent age substantially determine a patient's clinical picture in terms of higher educational and work load at this specific age (Kopeiko & Oleichik, 2007; Oleichik, 2011). The latest research shows that the cognitive component of depression influences the quality of social (educational, occupational) adaption and everyday functioning (Evans et al., 2013). Considerable research is dedicated to studying cognitive disorders that accompany depressive and phobic anxiety disorders during adolescence. However, several authors find most of the questions (especially on the pathogenetic role of the mentioned group of symptoms) to be open because of the methodological dissociation of present-day approaches in studying cognition in psychiatry and clinical psychology.

Non-psychotic affective disorders during adolescence are represented by three large units (excluding organic depressions and drug-induced depressions): affective illnesses (bipolar disorder spectrum), personality disorders, and schizophrenia. Contemporary studies on neurocognitive functioning at these nosologies display three aspects. First, different authors apply diverse assessment complexes which do not stand on a single theoretical basis. This difference in approach leads to content inter-comparison conflicts and causes considerable difficulties for data analysis. Second, the majority of studies analyze the nosotypical "cognitive profile" and its connection to different clinical characteristics (e.g., psychopathological symptoms severity on scales, duration of disease, and therapy) and genetic polymorphisms (endophenotypic approach). Possible cerebric mechanisms of cognitive deficit sometimes are not considered, or the neuropsychological facts conflict with neurovisualization data. Third, most researchers study only a minor quantity of clinical variants in the nosologies concerned. Therefore, considering the sufficient understanding of bipolar affective disorder with moderate and

hard severity phases, no neuropsychological studies on cyclothymia (soft bipolar disorder) exist. The neurocognitive profile of antisocial, borderline and schizotypal personality disorders has been well-studied. However, neuropsychological studies on other personality disorders (according to the international classifications standard) are either lacking or insufficient. Finally, only a small group of studies is dedicated to the neuropsychological analysis of adolescent pathology. The pathoplastic role of a pubertal factor is almost never considered. Most of the described drawbacks and restrictions in foreign neuropsychological research on non-organic mental disorders are noted by the authors themselves as well as by the authors conducting meta-analyses and reviews (Quraishi & Frangou, 2002; Ruocco, 2005; Lenzenweger, 2010).

Thus, the problem with the investigation of pathogenetic mechanisms (including cerebric ones) in adolescent depression within different nosologies is still of high importance. It is thought that the usage of Luria's neuropsychological method of syndrome analysis is expedient in accomplishing the system description of cognitive disorders and discovering cerebral dysfunction in patients with personality disorders during adolescence. This method has demonstrated its adequacy and heuristic superiority for studying cognitive process dysfunction in the clinical picture of mental disorders of non-organic genesis (Sidorova, Kaleda & Barkhatova, 2004; Ivanov & Neznanov, 2008; Gurovich & Shmukler, 2010).

The objective of this research is to study the features of neurocognitive functioning in patients with schizoid personality disorder and schizotypal personality disorder (against the norm), employing Luria's neuropsychological methodology. Hypotheses: 1) While both types of personality disorders are related to schizophrenia spectrum disorders besides general neuropsychological signs, specificity of neurocognitive functioning at each personality disorder will be observed. Specific neuropsychological symptoms will point to different brain deficits, which enables conclusions to be drawn concerning differences in the pathogenesis of each personality disorder; and 2) Luria's methodology neuropsychology is adequate for the study of neurocognitive functioning in personality disorders.

Method

Fifty adolescent male patients (16-25 years old) with non-psychotic mental disorders participated between 2010 and 2013 and were kept under in-patient treatment (chief, M.D. V.G. Kaleda) in the department for studying endogenous mental disorders and affective states at the Mental Health Research Center of Russian Academy of Medical Sciences (Director, Member of the Academy A.S. Tiganov). The patients were divided into two groups according to their nosological diagnoses: schizoid personality disorder (30 patients) and schizotypal personality disorder (20 patients). The control group consisted of 30 conventionally healthy men. The average age of the examined persons was 19.2 ± 3.7 years old, and the participants were consistent according to their social-demographic characteristics.

The diagnoses were conducted using a clinical-psychopathological method and on the basis of ICD-10 research criteria. The ground psychopathological syndrome

Table 1. Neuropsychological tests used in the research

Neuropsychological tests of praxis assessment	Neuropsychological tests of attention assessment	Neuropsychological tests of memory assessment	Neuropsychological tests of gnosis assessment	Neuropsychological tests of thinking assessment
1. Kinesthetic praxis: • Reciprocal coordination • Probe "Fist-edge-palm" • Graphomotor probe **2. Kinesthetic praxis:** • Demonstration of claws poses following the example • Transfer of claws poses without eye control **3. Spatial praxis:** • probes of H. Head • Arrangement of clock hands • picture of house, cube and table • with re-encoding **4. Regulatory (executive) praxis:** • Simple choice reaction • Conflict choice reaction	• Schulte Table • Bells-Test • Serial account	**1. Verbal memory** • Memorization of six words (immediate trial and two delayed trials) • Memorization of two groups of three words (immediate trial and two delayed trials) • Memorization of two phrases (immediate trial and two delayed trials) • Involuntary memorization of story (immediate trial and two delayed trials) • Voluntary memorization of story (immediate trial and two delayed trials) **2. Visuospatial memory** • Memorization of non-verbal figures • Recognition of figures	**1. Visual gnosis** • Recognition of schematic pictures • Recognition of crossed pictures • Recognition of superimposed pictures (figures of Poppelreiter) • Recognition of unfinished pictures • Recognition of noisy pictures • Recognition of faces **2. Non-verbal acoustic gnosis:** • recognition of rhythms (simple and complex) • reproduction of rhythms on the verbal instruction **3. Haptic gnosis**	**1. Verbal thinking:** • solving of 4 arithmetical problem • comprehension test of complex logical-grammatical constructions **2. Non-verbal thinking:** • Narrative picture • Serial picture • Serial picture with humour

of all patients was a depressive state of a moderate severity with distinctive features and occurring during adolescence (Vladimirova, 1987; Oleichik, 2011).

The exclusion criteria were the following: age less than 16 or over 25 years, the occurrence of a psychotic state at present or in the past; organic pathology of CNS, defining the clinical picture of heavy chronic somatic diseases, drug addiction or mental retardation. All participants were dextral.

The neuropsychological assessment of the patients was conducted during the first week of treatment according to Luria's (1973b) scheme using a specially designed qualitative-quantitative scale. The used neuropsychological tests are presented in Table 1. The results of each test were rated quantitatively according to a number of special qualitative subscales that related typical mistakes to a disorder of a specific neuropsychological factor. For example, when fulfilling the "Schematic sketch identification" there was an evaluation of not only visual paragnosia (disorder of the neuropsychological factor of visual analysis and synthesis) but also of fragmentary mistakes, chaotic character of structuring visual field, and visual perseverations (disorder of the neuropsychological factor of voluntary actions regulation — the neuropsychological executive factor). Points from each of the subscales (in all 438 points of rating) were summed and translated into T-points (0 through 3, where 0 is no disorder, 3 is a maximum degree of severity). Additionally, the following indices were created on basic neuropsychological factor functioning: executive control, kinetic, kineasthetic, tactile, auditory (verbal and non-verbal), spatial, visual, modally non-specific, energetic, and interhemispheric interaction. There were three macro-indices singled out according to Luria's conception on three structural functional blocks of the brain (Luria, 1973a). The participant groups were compared according to these indices using Mann-Whitney U-test criterion. Statistical analysis was performed using STATISTICA 9.0.

Results

The comparison of the data received after the neuropsychological examination indicated that the clinical group differed from the control group participants according to a number of parameters (indices) with different severities. The descriptive statistics are presented in Table 2.

The patients with **schizoid personality disorder** differed considerably from the healthy participants according to most of the indices (Fig. 1). There was an increase in the left hemisphere indices (Fig. 1) of "Executive function" ($U = 37.50$, $p = 0.000$) and "Kinetic action arrangement" ($U = 162.00$, $p = 0.020$). Qualitative analysis revealed that the increase in these indices was associated with mistakes on the type of rigidity, programming and control (executive functions) in the arithmetic operation tasks and motor reaction choice. Operational kinetic mistakes in the form of movement automation glitches, bugs, tendencies toward rigid enhancement or program simplification occurred in the trials on serial action arrangement (mostly by the right hand) and intellectual operations.

Table 2. Descriptive Statistics

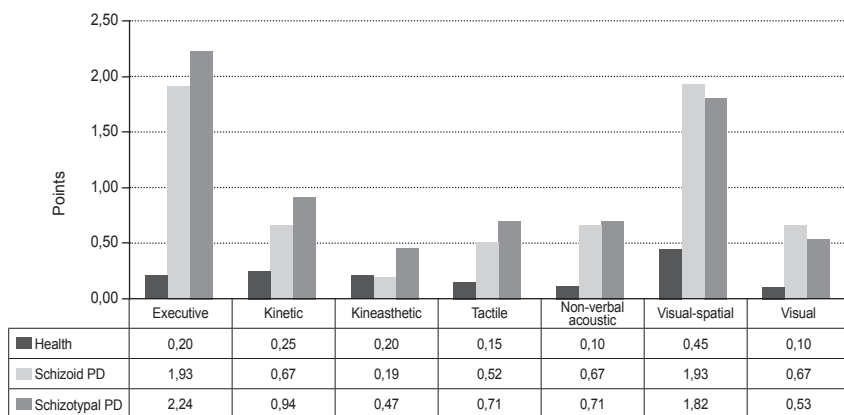|		Healthy		Cyclotymia		Schizoid		Schizotypal	
		M	SD	M	SD	M	SD	M	SD
Left Hemisphere Neuropsychological Factors	Executive	,2500	,43301	,3684	,49559	1,8148	,87868	1,9259	,91676
	Kinetic	,2000	,40000	,2105	,41885	,7778	,80064	1,1111	,84732
	Kineasthetic	,1500	,35707	,1579	,37463	,4074	,63605	,6296	,79169
	Tactile	,1000	,30000	,1053	,31530	,1852	,39585	,5185	,70002
	Phonematic	,1000	,30000	,1053	,31530	,5185	,80242	1,1481	,94883
	Quasispatial	,1500	,35707	,1579	,37463	,2593	,44658	,5556	,75107
	Visual	,0500	,21794	,0526	,22942	,0741	,26688	,1481	,36201
Right Hemisphere Neuropsychological Factors	Executive	,2000	,40000	,4211	,50726	1,9259	,87380	2,0370	,93978
	Kinetic	,2500	,43301	,3158	,47757	,6667	,78446	,8519	,90739
	Kineasthetic	,2000	,40000	,2105	,41885	,1852	,48334	,4074	,63605
	Tactile	,1500	,35707	,3684	,49559	,5185	,70002	,5556	,75107
	Acoustic	,1000	,30000	,5789	,76853	,6667	,62017	,6667	,62017
	Visual-spatial	,4500	,66895	,5789	,69248	1,9259	,95780	1,7037	,99285
	Visual	,1000	,30000	,1053	,31530	,6667	,78446	,5926	,63605
Subcortical Neuropsychological Factors	Modally nonspecific	,4000	,58310	,6316	,76089	1,5185	1,12217	2,0741	1,10683
	Energy Supply of Actions	,0000	,00000	1,5263	,84119	,6296	,68770	1,4074	1,08342
	Interhemispheric interaction	,1000	,30000	,1579	,37463	,2222	,42366	,3704	,56488
Blocks of the brain	I block of the brain	,4000	,58310	2,1579	1,06787	2,1481	1,43322	3,4815	1,84746
	II block of the brain	1,5500	1,20312	2,4211	1,53897	5,4074	3,73404	6,9259	4,81924
	III block of the brain	,9000	,76811	1,3158	1,00292	5,1852	2,48127	5,9259	2,90789

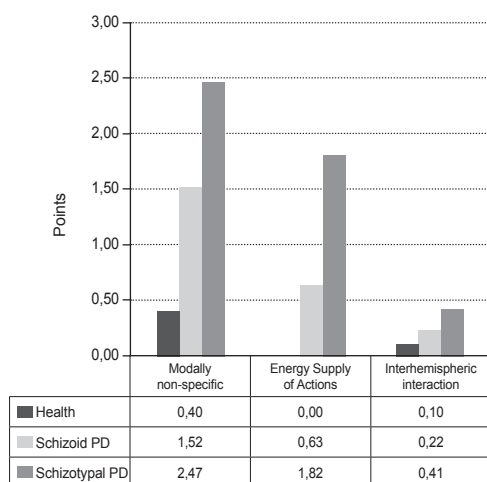|	Executive	Kinetic	Kineasthetic	Tactile	Phonematic	Quasispatal	Visual
Health	0,25	0,20	0,15	0,10	0,10	0,15	0,05
Schizoid PD	1,81	0,78	0,41	0,19	0,52	0,26	0,07
Schizotypal PD	2,06	1,24	0,65	0,65	1,29	0,65	0,18
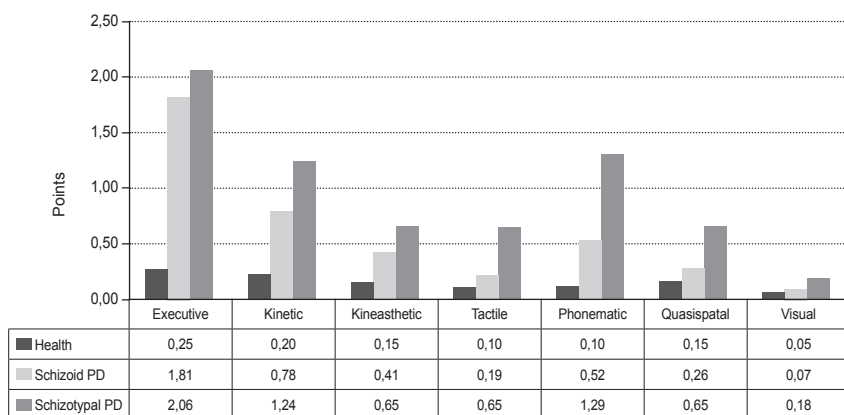
Figure 1. Indices of left hemispheric neuropsychological function factors, including mean values for the participant groups.

There were many more "right-hemispheric" indices compared to the norm (Fig. 2); these were the indices of "Executive function" (U = 28.00, p = 0.000) and "Visual-spatial analysis and synthesis" (U = 64.50, p = 0.000). The former had a high average that was determined by mistakes in the type of impulsion when accomplishing visual-figurative tasks by fragmentary perception and chaotic strategy of visual field structuring. The latter had non-gross mirror-like and metric mistakes. The increase of the "Modally non-specific factor" index (U = 119.00, p = 0.001) was caused by the increased trace memory inhibition as a result of interference (independent upon memorized material modality). Furthermore, there were high average marks (Fig. 2 and 3) in the "Non-verbal acoustic analysis and synthesis" (U = 135.00, p = 0.004) and "Energy Supply of actions" indices (U = 130.00, p = 0.003). There was also an increase (Fig. 2) in the "Visual analysis and synthesis" index (U = 162.00, p = 0.020) that was determined by the presence of standard and a small number of non-standard paragnosia in the trials for identification of schematic, noisy and unfinished images.

	Executive	Kinetic	Kineasthetic	Tactile	Non-verbal acoustic	Visual-spatial	Visual
Health	0,20	0,25	0,20	0,15	0,10	0,45	0,10
Schizoid PD	1,93	0,67	0,19	0,52	0,67	1,93	0,67
Schizotypal PD	2,24	0,94	0,47	0,71	0,71	1,82	0,53

Figure 2. Indices of right hemispheric neuropsychological function factors.

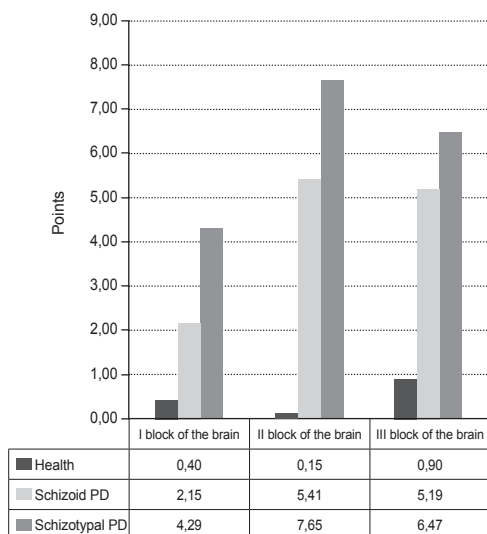|	Modally non-specific	Energy Supply of Actions	Interhemispheric interaction
■ Health	0,40	0,00	0,10
▨ Schizoid PD	1,52	0,63	0,22
▨ Schizotypal PD	2,47	1,82	0,41

Figure 3. Indices of the neuropsychological factor function
of subcortical structures of the brain.

The patients with **schizotypal personality disorder** were characterized by massive neuropsychological symptoms and differed significantly from the normal group. Compared to the healthy participants, there were no distinctions in the "left-hemispheric" indices, such as visual analysis and synthesis (U = 148.50, p = 0.512), kineasthetic factor (U = 111.00, p = 0.072, statistical trend-level), quasispatial analysis and synthesis (U = 112.50, p = 0.079, statistical trend-level), in addition to the "right-hemispheric" index — kineasthetic factor (U = 132.00, p = 0.246) and the "Interhemispheric interaction" index (U = 110.00, p = 0.067, statistical trend-level). In this regard, it appears to be expedient to compare the patients with a schizotypal personality disorder with the patients with a schizoid personality disorder. In comparison with the patient group with a schizoid personality disorder, the patients with a schizotypal disorder were characterized by a statistically significant increase in "left-hemispheric" indices (Fig. 1), including phonemic analysis and synthesis (U = 124.50, p = 0.011), tactile analysis and synthesis (U = 156.50, p = 0.078, statistical trend-level), quasispatial analysis and synthesis (U = 112.50, p = 0.067, and statistical trend-level). They also experienced a significant increase in two "subcortical" indices (Fig. 3), including energy supply of actions (U = 89.50, p = 0.001) and modal-nonspecific factor (U = 116.00, p = 0.006). The latter caused an increase in the macroindex (Fig. 4) "I block of the brain" (U = 74.50, p = 0.000). A high rate of the "Phonemic analysis and synthesis" index consisted of a great number of verbal and literal paraphasia, agrammatisms, and the problem of nomination in verbal and non-verbal trials in the patients of the given group. Some increase in the "Tactile analysis and synthesis" index was determined by accumulation of operational steregnostic mistakes (mostly right-handed) in the trial on object identification by means of touch feeling; and the increase in the "Quasispatial analysis and synthesis" index was determined by mistakes in understanding complex logic-grammatical constructions. A high rate of

the macroindex "I block of the brain" (Fig. 4) in the given cohort (in comparison with the other two groups) was connected with trace memory inhibition under the influence of interference and the gross energy disorders of the type of quick exhaustion the patients experienced over the course of examination with an insufficient level of motivational regulation of mental tonus and decreased efficiency of cognitive processes.

	I block of the brain	II block of the brain	III block of the brain
■ Health	0,40	0,15	0,90
■ Schizoid PD	2,15	5,41	5,19
■ Schizotypal PD	4,29	7,65	6,47

Figure 4. Indices of neuropsychological factor function within Luria's concept on three structural functional blocks of the brain.

Discussion

The conducted study demonstrated cognitive disorders as an integral part of the psychopathological structure on mental disorders in the field overlapping affective, pathocharacteristic and schizophrenic levels during adolescence. The neuropsychological approach demonstrated its adequacy in the arrangement of hypotheses on the pathogenetic links of the considered states.

In contrast to previous neuropsychological research on borderline (marginal) mental disorders during adolescence, there was an integrated methodology of Luria's neuropsychological syndrome analysis (1973a) used for the first time in this work. There was an analysis not only of separate mental processes but also the "functional organs" (intersecting links of mental functions, neuropsychological factors) of mental activity, as their state points to the degree of the function of certain cerebral mechanisms. Qualitative analysis of cognitive action disorders in neuropsychological situations enabled us to mark out nosotypical neuropsychological syndromes (metasyndromes) of the considered states.

The neuropsychological characteristics of schizoid personality disorder and schizotypal personality disorder differs by two features. The first is the presence of a particular, relatively non-specific neuropsychological symptom complex. This

concerns the regular combination of executive dysregulation, memory reduction and spatial disorders discovered in both groups of patients. This symptom complex was described earlier (Korsakova & Pluzhnikov, 2012) as "neuropsychological syndrome of adaption/dysadaptation" and connected with the dysfunction of the "constitutionally vulnerable axis" (front-thalamoparietal connections). It is considered as a task of neuropsychological conceptualization of compensation/decompensation syndrome (O.V. Kerbikov, N.I. Felinskaya, V.A. Guryeva, B.V. Shostakovich) in patients with psychopathic and psychopathic-like disorders within the "adaptation/dysadaptation" paradigm.

The second feature of the neuropsychological syndromology of the examined mental disorders showed neurocognitive disorders relatively typical of each of these groups. Except for the dysfunctions connected with the constitutionally vulnerable axis disturbance, the patients with schizoid personality disorder were characterized by the accumulation of neuropsychological symptoms caused by "weakness" of the temporal-parietal-occipital domain (secondary and tertiary, "associative" areas) of the right hemisphere of the brain, and disorders in the field of nonverbal auditory gnosis, visual-spatial and visual object perception. Patients with schizotypal personality disorders were characterized by a substantial severity and depth of neurocognitive disorders in comparison with the healthy participants and the patients in the two clinical groups. Additionally, an inverse neuropsychological picture was particular to the given patient group (distinguishing them from the patients with schizoid personality disorder) such that cognitive symptoms were connected with function deficiency in the rear departments of the left hemisphere of the brain, including paraphasia, agrammatisms, nomination mistakes, problems in understanding complex logical-grammatical constructions, and phenomena close to tactile agnosia (mostly by the right hand). These facts were in full conformity with the findings of foreign researchers (Raine, Lencz & Mednik, 1995; Lenzenweger, 2010), whose works affirmed that deficiency in left-hemispheric (mostly verbal) function could be regarded as one of the central neurocognitive endophenotypes of schizotypy as a personality trait and schizotypal personality disorder as a nosological unit. It was also reported that this endophenotype was an important high-probability predictor of psychosis occurrence (Ritsner, 2011). The tactile sphere was also compromised early in the schizophrenic disorders spectrum (Zvereva, 1998).

Conclusion

In the course of this study, it was ascertained that there was an increase in the severity and depth of cognitive disorders with changes in their qualitative structure in the continuum from schizoidia (personality level) to mild endogenous-process schizotypy. This increase should be considered when diagnosing and choosing a therapeutic strategy. The commonality of neuropsychological syndromology structure considering schizoid and schizotypal personality disorders could account for etiopathogenetic unity. However, lateral differences in the neuropsychological picture of each of the concerned anomalies proved a relative independence of schizoid status and schizotypy. The drawback of this

study is that all of the patients were examined in a current depressive state that could have influenced the findings. The perspective of further studies is to study the neuropsychological syndromology of non-psychotic mental disorders during adolescence in patients with no positive symptoms (in a state of euthymia, compensation, and out of exacerbation) in connection with their social adaption and quality of life.

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Occupation as a factor of personality subjective well-being

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This article examines personality subjective well-being and describes its psychological structure, general components and characteristics. An overview of foreign theories and studies on subjective well-being is presented. Correlations amongrelated concepts such as happiness, life satisfaction and subjective well-being are also described. Subjective well-being is seen as a multivariate construction of a stable nature in mobile equilibrium. It is argued that a type of professional activity can have great importance and a positive impact on an individual's social life, health, identity shaping and psychological wellness. This article's findings are substantiated by the survey administered to 2229 respondents divided into groups according to their area of business: students, psychologists, doctors, teachers, engineering and technical staff, representatives of service industries, workers, military men, and prisoners. The descriptors identified two types of natures: positive, directed to a person's inner world (happy, lucky, optimistic) and to the outer world (trustworthy, competent, successful), and negative (pessimistic, unhappy, envious). This division of nature type was categorized according to the participants' subjective well-being index. Empirical evidence has shown that occupational specificity influences a person's subjective well-being. A substantial difference was found in subjective well-being index of the respondents. A higher index is typical of students and military men. Educators and industrial intelligentsia also demonstrate an increased level of subjective well-being, whereas prisoners tend to have a low level of subjective well-being. The same low index is characteristic of servicing trade representatives and psychologists.

Key words: personality, subjective well-being, life satisfaction, psychological security.

Introduction

Subjective well-being is an important issue in social development because experience of one's own personal well-being is a prerequisite for the person's successful functioning in society.

Two traditions that contributed to the growth of interest in the phenomenon of psychological well-being should be highlighted:

- Hedonistic tradition, which focuses on such constructs as pleasure, happiness, positive impact and life satisfaction (N.M. Bradburn, E. Diener, D. Kahneman, E. Diener, N. Schwarz, S. Lyubomirsky, H.S. Lepper);
- Eudaemonism, which considers human longing for happiness to be fundamental in his behavior (C.R. Rogers, C.D. Ryff, A.S. Waterman).

Following these traditions, there exist two perspectives that analyze the phenomenon of psychological well-being from various angles (Lopez & Snyder, 2009). The first perspective is based on the eudemonistic approach (Ruff & Keyes, 1995), which considers well-being to be the ultimate goal of human existence and functioning. The second stance that originates in the hedonistic approach relates to subjective well-being theory, also known as the theory of emotional well-being suggested by E. Dienerand his colleagues (Diener, 1984; Diener, Suh, Lucas &Smith, 1999).They suppose that people's assessments of their own lives reflect the very nature of well-being. Despite these differences in approaches, there is a general agreement that well-being is a multi-variant construct (E. Diener, S. Abdallah, S. Thompson, J. Michaelson, N. Marks & N. Steuer, J. Stiglitz, A. Sen & J. Fitoussi).

Psychological well-being possesses three determinative features.

The first feature is subjectivity (Diener, 1994; Parducci,1995).In other words, people are happy if they consider themselves to be happy.

Second, well-being comprises emotional states (i.e., psychologically secure people are likely to experience positive emotions such as happiness and joy and are unlikely to have negative emotions such as sadness and anger) (Argyle, 1987; Diener & Larsen, 1993; Larsen & Diener, 1992; Warr, 1987, 1990).

Third, psychological well-being is reflected in people's attitude towards life (Diener, 1994; Myers, 1992; Veenhoven, 1988).

Carol Ryff defined the following aspects of psychological well-being: self-sufficiency, positive relationships with other people, life goals, self-realization, potential, and self-acceptance (Ryff, 1989). Multiple researchers then enriched this list with such aspects as the ability to successfully accomplish tasks (Foresight Mental Capital and Wellbeing Project, 2008), psychological capital, happiness (Pollard & Lee,2003), and life satisfaction (Diener & Suh,1997; Seligman, 2002a, 2002b).

The first attempt to define psychological well-being was made by N. Bradburn in 1969. His survey marked the shift from psychiatric diagnostics to a focus on ordinary people's reactions. He observed how people tried to cope with hardships and everyday problems. In his works, N. Bradburn emphasized the importance of psychological well-being for overcoming hardships. He believed that a person could be psychologically well only if his positive emotions overpowered negative emotions (Bradburn, 1969).

Generally, sensations play a dominant role in theories of subjective well-being. These sensations have been addressed in the works of E. Diener and E. Suh. They argued that subjective well-being consisted of three interconnected components: life satisfaction (cognitive sphere) and positive and negative emotions (affective sphere) (Diener & Suh, 1997).

In addition to health benefits, positive emotions are closely associated with psychological wellness (Fredrickson, 2000). For example, strategies for personality psychological security, to a great extent, depend on a person's positive emotional state. Positive re-evaluating and adding meaning to ordinary events can act as stress relief. These strategies help people acquire crisis management (coping) skills that contribute not only to psychological security but also to overall psychological well-being.

Laughter generates positive sensations (Bachorowski & Owren, 2001) and reinforces the immune system. It is important to note that the laughter effect is mediated by subjective experiences and impacts subjective well-being (Mahony, Burroughs & Lippman, 2002). Laughter is often associated with humor (cognitive construct). People who make use of humor can cope with stressful situations more effectively. Laughter increases the amount of immunoglobulins, a vitally important protein that protects human organisms from respiratory diseases. These data show that people capable of preserving a positive emotional state under stress demonstrate a higher immunity level (Dillon, Minchoff & Baker, 1985).

Empirical data prove that positive emotions add to adjustment to acute and chronic situational stresses. For example, people who were able to find positive sensations and positive purport while caring for relatives and friends with HIV could handle their grief caused by the death of that person with greater ease (Folkman & Moskowitz, 2000).The same effect can be seen in children of women who managed to have a positive attitude despite difficultly in their delivery and extended admission; both mothers and children showed a lower percent of complications if they had healthy general psychological well-being (Affleck & Tennen, 1996). In the context of personal stress, a positive spirit can provide a "safety cushion", which is necessary for further efforts to cope with stress.

In the past few decades, the amount of studies dedicated to subjective well-being has increased, which testifies to its social demand, individual value relevance, importance of subjective expertise and acceptance that well-being includes aspects that go beyond economic prosperity (Diener, Suh, Lucas & Smith, 1999). This phenomenon attracted scientists' active interest in the late 1960s, but as a subject of philosophic thought, it has existed and been challenged since ancient times. Currently, researchers have not agreed to a single definition of subjective well-being,and various concepts have been suggested, including "psychological well-being", "subjective well-being", "happiness" and "life satisfaction" (Karapetyan, 2014).

Modern research efforts are directed to the search of subjective well-being, life satisfaction and happiness indicators. In her monograph, S.V. Yaremchuk (Yaremchuk,2012) analyzed western and domestic research on subjective well-being. In the USA, Austria and many other EU countries, monitoring of subjective well-being is regularly conducted. In Russia, this area of research is in its initial stage. The few studies that have been conducted are fragmented and small. In these psychological surveys, subjective well-being normally includes cognitive (life satisfaction) and affective (positive emotion experience) components. In contrast, foreign records allow experts to summarize external variables that define individual subjective well-being (age, gender, social status, residence, income, etc.).According to these publications, individual variables greatly contributed to the explanation

of subjective well-being (H.M. Kehr, D. Nettle, J.D. Blore) (quoted in Shamionov, 2008). M. Argyle (Argyle, 2003) wrote about the insignificance of objective factors' influence on subjective well-being levels. Some domestic papers find consistent patterns in Russian subjective well-being that differ from those in foreign research works (Yaremchuk, 2013). P.M. Shamionov (Shamionov, 2008) assumes that specific cognitive features of subjective well-being exist, and their criteria differ among social groups including professional fields.

Subjective well-being is what people call happiness, satisfaction or pleasure.

Subjective well-being is a relatively stable construct. In addition to particular personal characteristics, a person possesses a particular stable level of subjective well-being, and he strives to preserve it. Therefore, B. Headey and A. Wearing (Headey & Wearing, 1992) stated that a balance between a person, an event and psychological well-being exists. Whereas in mobile equilibrium, the nature of subjective well-being is steady most of the time. Additionally, equilibrium involves physical well-being, physical resources, absence of fatigue, psychological well-being, unrestricted mobility efficiency in actions, and good relationships with people (Herzlich,1973). Philip Brickman and Donald Campbell(Brickman & Campbell, 1971)reported that people are likely to return to a previous level of happiness even after very memorable events in their life (marriage, birth of children, etc.). According to J. Ormeland and W. Schaufeli (Ormel & Schaufeli, 1991), only recent events affect people's subjective well-being, and this influence decreases quickly.

Recently, the theory of equilibrium has been further developed in the works by E.M. Cummings and P.T. Davies (Cummings & Davies, 2010), who replaced the notion "equilibrium" with the notion "homeostasis". The authors demonstrate the role of homeostasis in protecting a particular level of subjective well-being and formulate the following constants:

- If a person experiences no challenge, subjective well-being remains at the given value level.
- When faced with a reasonable challenge, an individual's level of subjective well-being will slightly differ within the given value.
- A strong homeostatic defense prevents the level of subjective well-being from dramatically dropping below the given value.
- If the task is too complicated for homeostasis, the level of subjective well-being decreases sharply.

In the study by Leo B. Hendry and Marion Kloep (Hendry & Kloep, 2002) dealing with the correlation between problems and personal resources, their theory was based on five basic principles:

1) To stimulate development, people have to face problems.
2) Successful resolution of problems gives rise to advancement.
3) If the problem is not settled, it can provoke further problems in future problem solving.
4) Problem solving is a dialectical process, which leads to personality and/or environment changes and, consequently facilitates development.
5) People possess various levels of resources for problem solving.

The findings of recent studies prove the idea that subjective well-being is close-ly connected with personality-specific features (E. Diener, N. Hayes & S. Joseph, J.L. Gutierrez), religiosity (M.M. Poloma & B.F. Pendleton), self-respect (U. Schim-mack & E.D. Diener), harmony in interpersonal relations (A. Reid), and goal achievement (H.M. Kehr). Factors defining subjective well-being vary and comprise age, race, gender, education, income, social relations and occupation (C.L.M. Keyes & M.B. Waterman).

Subjective well-being depends on achievements in various spheres (i.e., health, finance, leisure and work) (Van Praag et al., 2003).Vocational factors also add to subjective well-being, particularly to professional comparison and professional identity (Lachterman & Meir, 2004).

Throughout the entire XX century, the question of how professional activity influenced an individual was widely discussed by scholars in the field of organiza-tional studies (B. Furåker, R. Hackman & G.R. Oldham, L.H. Hansen & P. Orban, L. Lennerlöf, P. Pettersson, T. Theorell, C. Von Otter), and work was mainly treated as a risk factor. Some researchers concentrated on positive aspects of professional activity. Thus, some scholars (M. Jahoda, R.L. Kahn, S.E. Kunnen, H.A. Bosma, S.E. Van Halen & C.P.M. Van der Meulen, K.E. Weick) argued that work could be of great significance and has a positive impact on a person's social life and shape his/her identity. Additionally, occupation can positively affect people's health and psychological well-being (U. Ericsson, J.Forslin, M. Frankenhaeuser) and be a vi-tal indicator of subjective well-being (L. Foldspang, M. Mark, K. Mørk Puggaard, O.M. Melchior Poulsen, U. Johansson, G. Ahonen, S. Aasnaess). Therefore, work possesses a great potential for personal and professional development (T. Back-ström, F.M. van Eijnatten, M. Kira, G. Brulin, E. Ekstedt, P. Docherty, J. Forslin, A.B. Shani, J. Forslin). J. R. Graham and M. L. Shier (Graham & Shier, 2010) proved that interpersonal relationships at and away from work are principal factors that influence the subjective well-being of employees.

Positive indicators of subjective well-being associated with professional activity involve job satisfaction. Negative indicators comprise workaholism and burnout.

In 2001 in Sweden, U.G. Gerdthamand M. Johannesson (Gerdtham & Johan-nesson, 2001) found a direct positive correlation between education and subjective well-being, in which people with a diploma of higher education feel happier and more satisfied. Several years later, Guglielmo Maria Caporale and her colleagues (Caporale at al., 2007) substantiated the hypothesis that subjective well-being of people with a higher level of education directly depends on their income. Qualifi-cation gives rise to particular expectations associated with a high level of income, which do not always come true. Richard A. Easterlin (Easterlin, 2003) also de-tected a positive correlation between education level and subjective well-being throughout the person's lifespan. His findings show that well-educated people of any age are likely to be happier than those with a low educational level.

We assume that specific features and differences in subjective well-being de-pend not only on professional activity but also on a person's area of business. In Russian professions, *a main type of labor activity* requires particular training and makes a sustainable livelihood. The notion "occupation" has several meanings, and in the framework of our study, we treat it as an activity a person is engaged in dur-

ing a particular period of time. Profession is something integral, although in some cases it does not coincide with the current area of work.

It can be illustrated by the example of students and prisoners. Additionally, being trained in a profession, a person can be involved in various types of activity due to circumstances.

Method

Sampling

The number of respondents was 2229 people divided according to their occupation. They were organized into 9 categories: students (432), psychologists (254), doctors (85), educators (221), engineering and technical staff (264), service industry employees (212), workers (112), military men (298), and prisoners (351).

Methods

L.V. Karapetyan, in collaboration with G.A. Glotova, analyzed psychological well-being and developed a new research instrument (Glotova &, Karapetyan, 2009). Nine descriptors of subjective well-being were defined, and the respondents were asked to evaluate themselves according to a 7-grade scale:

1) Three positive descriptors — happy, lucky, optimistic — oriented to a person's inner world (i.e., a person's life attitude, attitudes toward personal past and future, sense of shelteredness/insecurity). They comprised inward-oriented indicators of subjective well-being (internal positive indicator of subjective well-being (SW);

2) Three positive descriptors — reliable, competent, successful — oriented to the outer world (i.e., personal relationships with friends, family and colleagues; occupation activity and its quality). These descriptors constituted positive external indicators of subjective well-being;

3) Three negative descriptors — pessimistic, unhappy, envious — a lowered general level of subjective well-being is a negative indicator of subjective well-being.

Results

The results obtained show that the respondents clearly understand the task of self-assessment consistent with the above-mentioned SW descriptors. In addition to separate descriptor estimates, we also computed overall estimates of each of the three blocks (indicators) and integral estimation by indicators (A+B-C). This integral estimation was named the subjective well-being index.

Based on the three blocks of descriptor assessments, the subjects were divided into four groups by a two-step cluster analysis: low, decreased, increased and high index of subjective well-being. The most numerous group (28.6%) was the group with decreased SW index (638); the groups with low and high SW indexes demonstrated an almost equal number of respondents (25.9% of all of the respondents; 578 and 577 people, respectively). The low SW index group included the lowest number of respondents (436) and constituted 19.6 % of all of the respondents.

Table 1. The subjects' objective well-being index

	N	SW index	Positive internal indicator	Positive external indicator	Negative indicator
Doctors	85	26.92	15.58	16.61	5.27
Service industry	212	24.76	14.98	15.23	5.45
Industrial intelligentsia	264	24.04	14.44	15.37	5.77
Workers	112	24.23	14.66	14.88	5.31
Military men	298	26.77	16.23	16.64	6.10
psychologists	254	24.82	15.68	15.02	5.87
Educators	221	25.05	15.06	15.73	5.74
Students	432	24.13	14.99	15.43	6.30
Prisoners	351	16.87	11.04	12.65	6.83
Total	2229	23.67	14.56	15.13	6.02

Table 2. Sampling distribution by groups with low, decreased, increased and high subjective well-being index

	Low SW index	Decreased SW index	Increased SW index	High SW index
Doctors	0	0	85	0
	.00%	.00%	13.32%	.00%
Service industry	10	202	0	0
	1.73%	46.33%	.00%	.00%
Industrial intelligentsia	9	0	255	0
	1.56%	.00%	39.97%	.00%
Workers	10	0	102	0
	1.73%	.00%	15.99%	.00%
Military men	35	0	0	263
	6.06%	.00%	.00%	45.58%
Psychologists	20	234	0	0
	3.46%	53.67%	.00%	.00%
Educators	25	0	196	0
	4.33%	.00%	30.72%	.00%
Students	118	0	0	314
	20.42%	.00%	.00%	54.42%
Prisoners	351	0	0	0
	60.73%	.00%	.00%	.00%
Total	578	436	638	577
	100.00%	100.00%	100.00%	100.00%

The majority of the low SW group were prisoners (67.3%), and 20.42% were students; these individuals had high values of negative indicators. The representatives of the remaining types of activities comprised an insignificant number. Generally, maximum high values of negative indicators are typical of this group, whereas positive indicators of this group (both internal and external) were expressed minimally.

The group with decreased SW index had low external positive descriptors' values and high expression of negative indicators. A total of 53.67% of psychologists and service industry employees (46.33%) were included in this group.

Industrial intelligentsia (39.97%), educators (30.72%), workers (15.99%) and doctors (13.32%) formed the group with an increased SW index. External positive descriptors were higher in this group compared to the decreased SW group.

Representatives of the fourth group (54.42% of students and 45.58% of military men) possessed high SW index. They had the highest valued of both internal and external positive indicators and the lowest value of negative indicators.

Conclusion

The analysis of the results obtained made it possible to draw the following conclusions:

1. The problem of subjective well-being is well represented in the psychological literature. Factors influencing its formation are theoretically formulated and considered. However, the impact of occupation has not been addressed in the publications we have studied.

2. Various approaches to the given issue and to its criteria exist. Yet, the existing models determine the level based on positive criteria.

3. The individual descriptors of subjective well-being (positively oriented to the personal inner world, positively oriented to the personal outer world, and negative factors) made it possible to differentiate the overall sample and divided the respondents into groups based on the subjective well-being index.

4. The existing difference between respondents engaged in various types of activities manifests itself in the index of subjective well-being.

5. Among respondents with a high level of subjective well-being, there are many students and military men. Both types of individuals are highly represented in the group with a low level of subjective well-being, which can possibly be explained by radical judgment in assessing their own positive and negative qualities.

6. An increased level of subjective well-being is common in educators and industrial intelligentsia.

7. Prisoners normally have a low level of subjective well-being.

8. Service industry employees as well as psychologists are likely to have a decreased level of subjective well-being. Representatives of "person-person" professions do not highly evaluate their own qualities in regard to predicted well-being ("reliable", "competent", "successful") due to a high degree of reflexivity.

9. Because the questionnaire used in the survey is a minimized version of a psychodiagnostic tool and has a limited capacity. To obtain firm conclusions of the

subjects' real subjective well-being, it is necessary to analyze the questionnaire correlations with other techniques to identify the level of the given construct.

10. The correlations among subjective well-being and individual and personality characteristics of the respondents in regard to their occupation should be explored.

Therefore, this study proves that occupation-specific features influence personality subjective well-being, and the given problem should be further addressed both theoretically and empirically in thorough and more detailed studies.

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