**BASE DO DESENVOLVIMENTO DA PERSONALIDADE PSICOLÓGICA E
PROFISSIONAL DE FUTUROS PSICÓLOGOS EDUCACIONAIS****BASIS OF PSYCHOLOGICAL AND PROFESSIONAL PERSONALITY DEVELOPMENT OF
FUTURE EDUCATIONAL PSYCHOLOGISTS****ОСНОВЫ ПСИХОЛОГИЧЕСКОГО И ПРОФЕССИОНАЛЬНОГО РАЗВИТИЯ
ЛИЧНОСТИ БУДУЩИХ ПЕДАГОГОВ-ПСИХОЛОГОВ**

NAGIMZHANOVA, Karakat M.^{1*}; BAIMANOVA, Lyazzat²; MAGAVIN, Sabit Sh.³;
ADZHIBAEVA, Botagoz Zh.⁴; BETKENOVA, Meruert S.⁵;

¹ Turan-Astana University, Department of Pedagogy and Psychology, Astana – Republic of Kazakhstan

² Sh. Ualikhanov Kokshetau State University, Department of Foreign Language, Kokshetau – Republic of Kazakhstan

³ S.Seifullin Kazakh AgroTechnical University, Department of Technological Machines and Equipment, Astana – Republic of Kazakhstan

⁴ Astana Medical University, Department of Dentistry, Astana – Republic of Kazakhstan

⁵ Kazakh National University of the Arts, Department of Social and Humanitarian Disciplines, Astana – Republic of Kazakhstan

* Correspondence author
e-mail: karakat_4@mail.ru

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RESUMO

As mudanças no sistema de ensino superior atualmente em curso estão associadas à busca e criação de condições psicológicas e pedagógicas para a formação de competências gerais e profissionais que permitam que futuros especialistas realizem seu potencial pessoal e criativo. Portanto, o principal objetivo do trabalho foi analisar os fundamentos do desenvolvimento psicológico e profissional da personalidade dos futuros professores-psicólogos. Para atingir esse objetivo, os autores utilizaram o método de análise e as abordagens metodológicas de atividade autorreguladora do sujeito orientada à personalidade. Foi estabelecido que o desenvolvimento fisiológico e profissional dos psicólogos educacionais, especialmente nos estágios iniciais, desempenha um papel decisivo na criação das bases para o bem-estar da comunidade. Foi determinado que, para resolver problemas psicológicos (dos adultos e crianças), os profissionais precisam do conhecimento profundo da disciplina e do uso de habilidades criativas. A formação de um professor-psicólogo prossegue ao longo de sua carreira profissional. A universidade estabelece as bases para qualidades profissionais e significativas profissionalmente de um especialista, que posteriormente garantem a formação profissional da personalidade no processo de atividade psicológica e pedagógica. Com base em dados gráficos, os autores estabeleceram as características do desenvolvimento dos principais componentes e sua relação na estrutura da prontidão da pessoa. O estudo apresentado contribuirá para a formação de prontidão da pessoa para as atividades profissionais de futuros professores-psicólogos.

Palavras-chave: *distinção profissional, psicólogos educacionais, desenvolvimento pessoal, sistema educacional moderno.*

ABSTRACT

Changes in the system of higher professional education that are currently taking place are associated with the search and creation of psychological and pedagogical conditions for the formation of general and professional competencies that allow future specialists to realize their personal and creative potential. Therefore, the main objective of the paper was to analyze the basics of the psychological and professional personality development of future teachers-psychologists. To achieve this objective, the authors employed the

analysis method, subject-activity, and personality-oriented methodological approaches. It was established that the physiological and professional development of educational psychologists, especially in the early stages, plays a decisive role in laying the foundations for the welfare of the community. It was determined that to solve psychological problems (of adults and children), practitioners require in-depth knowledge of the discipline, the application of creative skills. The becoming of a teacher-psychologist continues throughout their entire professional career. The university lays the foundation for professionally significant and personal qualities of a specialist, which subsequently ensure the professional becoming of the personality in the process of psychological and pedagogical activity. Based on the graphic data, the authors established the features of the development of the main components and their relationship in the structure of personal readiness. The presented research will contribute to the maturation of personal readiness for the professional activities of future teachers-psychologists.

Keywords: *professional distinctiveness, educational psychologists, personal development, modern educational system.*

АННОТАЦИЯ

Изменения в системе высшего профессионального образования, происходящие в настоящее время, связаны с поиском и созданием психолого-педагогических условий для формирования общих и профессиональных компетенций, позволяющих будущим специалистам реализовать свой личностный и творческий потенциал. Поэтому основная цель работы заключается в анализе основ психологического и профессионального развития личности будущих педагогов-психологов. Для достижения поставленной цели авторами использован метод анализа, субъектно-деятельностные и личностно-ориентированные методологические подходы. Установлено, что физиологическое и профессиональное развитие педагогических психологов, особенно на ранних этапах, играет решающую роль в создании основ для благополучия сообщества. Определено, что для решения психологических проблем (взрослых и детей) практикам необходимы глубокие знания дисциплины, применение творческих навыков. Становление педагога-психолога протекает на протяжении всей профессиональной деятельности. В вузе закладываются основы профессионально значимых и личностных качеств специалиста, которые в последующем обеспечивают профессиональное становление личности в процессе психолого-педагогической деятельности. На основе графических данных авторами установлены особенности развития основных компонентов и их взаимосвязи в структуре личностной готовности. Представленное исследование поспособствует формированию личностной готовности к профессиональной деятельности будущих педагогов-психологов.

Ключевые слова: *профессиональная индивидуальность, педагогические психологи, личное развитие, современная образовательная система.*

1. INTRODUCTION

Today, the practice of educational psychology is taking place in a complex, challenging and ever-changing context where professional confidence is difficult to maintain and where it is easy for EP practitioners to lose sight of the beliefs, hopes, and aspirations with which they entered the profession. Educational Psychologists in several case study interviews expressed concerns about the extent to which they have the requisite knowledge and skills to enable them to work in this wider context. Many feel that, whilst their initial training has prepared them for this wider role ... [they] need additional training to ensure that they are able to fulfill the new role expected of them.

Several reasons have been put forward to explain why many EP practitioners appear to be experiencing something of an identity crisis (Cameron and Monsen, 2005). Such professional

anxiety has surfaced in the form of rifts within the profession about the nature of professional training for the EP practitioners of the future; uncertainty about their professional role in a new children's workforce, and a lack of corporate confidence in their ability to influence future developments in services for children and young people (Lunt and Majors, 2000; Norwich, 2005; or the extended summer 2005 debate on EPNET on what constitutes the 'basic' work of an educational psychologist). Of course, educational psychology is not the only profession to be living in 'interesting' times. However, educational psychologists appear to be suffering from a double whammy: pressure from central and local government to squeeze into a new service model for children and young people and self-doubts about the relevance of their skills and knowledge in this new millennium environment. Lunt and Majors (2000) have argued that somewhere along the way EP seems to have lost their

psychology, a point supported by Norwich (2005) who claims: theoretical concepts are applied to produce practical principles and techniques, with their origins often not known or ignored by practitioners.

A recent DfES document on the Educational Psychology Service views the work of educational psychologists in broad terms as providing “assessment, consultation, advice and training to early year’s settings, schools, families and the Local Education Authority”. Curran, Gersch and Wolfendale (Curran *et al.*, 2003) have offered a more pragmatic, if traditional, service delivery model and outlined three potential levels at which EPs can operate:

- The **individual** (for example, assessment and intervention with an individual child).
- The **organization** (for example, in a school providing in-service training of teachers).
- The **system** (for example, in a Local Education Authority which is developing innovatory, special or additional education provision).

Within the profession itself, the aforementioned EPNET debate eventually resulted in a one-sentence description of ‘basic work’ which read more like a worthy political statement than a precise role description: “Educational Psychologists are applied psychologists who primarily address issues within children’s development and learning, whilst supporting equal opportunities relating to removal of barriers in culture, race, gender, disability, and social disadvantage, ultimately promoting inclusion at all these levels.” A list of the key features of educational psychological practice has been provided by Gersch (2004) and this includes: helping children; employing effective interpersonal skills; listening to children and adults; being objective and dispassionate; creative problem solving; offering practical help; assisting and facilitating when things get stuck; applying research to real-life problems; being empirically grounded; evaluating interventions and actions (using evidence-based criteria); working directly and through others, and adding value to people’s lives. While all of these are worthy tasks, none of them could be viewed as being exclusive to the EP practitioner.

How to achieve a measure of professional distinctiveness has been the subject of considerable debate within the profession. Some journal contributors have recommended an

improved strategy for EP service delivery (Evans, 2005) or a more cohesive practitioner approach to major problem areas such as social, emotional and behavioral difficulties (Rees *et al.*, 2003). Others have called for a critical evaluation of the theoretical foundations of expert practice in general (Moore, 2005) and the practice of educational psychology in particular (Leadbetter, 2005). At the ‘big picture’ level, Baxter and Frederickson (Baxter and Frederickson, 2005) have argued that educational psychologists should be widening their practice beyond the traditional special needs client groups and promoting positive development outcomes for all children (Lysytsia *et al.*, 2019).

Interesting though these recommendations are, they still do not address the particular and distinctive contribution of the EP or provide a convincing answer to the question posed by the Special Educational Needs and Disability Division/Children’s Workforce Unit, (Smith, 2005) viz. “What is it that EPs bring to a situation that is different from what others bring?” In short, how can we respond to the blunt challenge from Wood (1998): “Okay, then: what do EPs develop?”

1.1. Blurring the distinctiveness factor

In highlighting the distinctive component of applied psychology, there are several natural and imposed barriers to be overcome. In the first place, all professional problem solvers (from plumbers to psychologists) employ some kind of systematic problem-solving procedure. Such a procedure often includes components like a systematic investigation of the problem situation, clarification of the problem itself, a clear perspective of what needs to be done to overcome the problem, a strategy for achieving this and monitoring or follow-up to see that the outcome has been achieved and has overcome or reduced the original problem. Clearly, then, systematic problem solving, like the solution-focused approach advocated by Stobie, Boyle, and Woolfson (Stobie *et al.*, 2005) is by no means the sole prerogative of the practicing EP.

Secondly, in all human life psychology is ubiquitous: the simplest and the most complex features of people’s behavior have a psychological explanation lurking somewhere! Sometimes, this psychological component is obvious and, therefore, clients are likely to view a psychological explanation as unspectacular, everyday and ordinary (“Our psychologist often tells us what we know already!”) On other

occasions, when the explanation is not at all obvious, parents, teachers and others who are being asked to implement an EP-recommended strategy for change may express more than a degree of skepticism.

Thirdly, for all applied psychologists, there remain the twin challenges of linking highly specific, frequently-piecemeal research with the urgent and often-messy demands of the real world. The task of making this link between the problem under discussion and the recommended approaches to understanding and managing this problem intelligible to people who may not have a background in psychological research and theory requires considerable creativity and high-level communication skills.

In a sentence, then, applied psychologists are required to use psychology in a creative and innovative way, so as to provide an integrated and coherent perspective of complex environments (e.g., school, homes, children's homes, etc), the complex problems and situations which occur in such environments (e.g., critical incidents, parental uncertainty, teacher stress, children's learning and behavior difficulties, etc) and the complex needs of people which results from such problems (e.g., reassurance, insight, skill deficits, challenges to current belief systems, etc).

Achieving a transparent connection between psychology and the problems of adults and children will require applied practitioners to utilize sophisticated consultation processes and an in-depth knowledge of the discipline, so that they can provide people with a deeper understanding of problematic situations, offer research-based, creative and effective ways of managing these problems, and also promote proactive approaches to minimize the occurrence and impact of such problems in the first place.

What then are the distinguishing features of applied psychology practice? To answer this question, it is necessary to move beyond the conventional, but narrow, focus on practice improvement to uncover some of the higher-order conceptual processes which are likely to make the EP's perspective different from those of other professional groups. In this paper, I would like to discuss five distinctive factors and readers are invited to consider their own additions to this list:

(a) Adopting a psychological perspective of the nature of human problems.

(b) Drawing on the knowledge base of psychology to uncover mediating variables which

may provide an explanation of why certain events may be related.

(c) Unraveling problem dimensions using sophisticated models which can be used to navigate through a sea of complex human data and to provide a simple but useful map of the interaction between people factors and aspects of their living/ learning environments.

(d) Using information from the research and theoretical database in psychology to recommend evidence-based strategies for change.

(e) Promoting innovative concepts or big ideas which are underpinned by psychological research evidence and theory and which can enable clients to spot potential opportunities for positive change.

These arguably distinctive aspects of applied psychology practice will now be discussed in turn. The psychologist adds a distinct perspective, asks particular types of questions and uses validated interventions and tools. This perspective is grounded in scientific psychology on the one hand and a commitment to evidence-based practice and scientific methods on the other. Applied psychologists approach human problems with specific and well-established psychological perspectives in mind. In psychology, it is generally accepted that human behavior is most usefully viewed from an eco-systemic perspective which emphasizes the complex, interdependent and recurring nature of the links between a variety of contextual, personal, and interpersonal variables. Such a stance involves:

- Adopting an interactive rather than single-factor view of problems or problem situations (Morton, 2004; Cameron and Monsen, 2005).

- Recognizing that human problems have different levels or layers, ranging from within-person to within-home, school, community and beyond (Curran *et al.*, 2003).

- Attempting to understand and reconcile the different perspectives which people may bring to a particular problem situation (as an illustration, accounts of the widely differing attributions of disruptive behavior held by pupils, parents, and teachers can be found in Miller, 2003).

- Unpicking the human factors which can hasten or hinder the process of desired change, especially: gaining commitment to change,

understanding group processes, recognizing the power of people's belief systems, and employing sophisticated procedures to encourage joint planning of monitoring, evaluation, reflection, and personal/professional development. In particular, psychologists often find themselves introducing the possibility of change to children, teachers and parents who, themselves, may see no need for such change and, while this presents a tough professional challenge, strategies have been developed to help a 'reluctant' client to move from a pre-contemplation to a contemplation of change stance (McNamara, 1998).

The distinctive advantage of all these psychological perspectives is that a rich and multi-layered picture of the problem situation is constructed, while stereotyping, especially of persons from diverse backgrounds, is reduced and common biases, snap judgments and unwarranted explanations are minimized.

1.2. Uncovering mediating variables

In the education sector, many new approaches to problems (e.g., the introduction of the literacy or numeracy hours) could be said to exist at the a-theoretical level: an exclusive focus on previous success or failure contexts is not uncommon. It is the a-theoretical model which is in operation when a previously successful headteacher is invited to take control of a failing school, presumably in the hope that the success formula will travel with him/ her. A-theoretical research is mainly concerned with knowing that certain (often-unspecified) factors seem to be regularly associated with particular outcomes. Theoretical research, on the other hand, attempts to discover why particular variables (e.g., the 'weak' headteacher) seem to generate specific outcomes (e.g., the 'failing' school). In other words, it is the nature of the relationship between input and outcome which is the focus of the interest for the psychologist and it is this quest for explanatory factors which is the reason of psychological research and theory.

Therefore, the emphasis of most research and theory in psychology is upon the mediating or explanatory variables, i.e., those factors which not only offer reasons for the occurrence of particular human phenomena at a certain point in time but also provide explanations which can be generalized to other similar situations. While applied psychology can often provide insight into those aspects of human behavior which are unusual, complex, exotic and bizarre, it can also illuminate the common-place by challenging what

may appear to many as the obvious links between human problems (and successes) and their antecedents, contexts, and outcomes. A global example of mediating variables in action concerns the apparently obvious and super-glued relationship between a lack of resources, on one hand, and the poverty, unhappiness, and ill-health which results from such a deficit, on the other (Rymashevskaya *et al.*, 2017).

Yet, well-meaning, early attempts to tackle poverty by throwing resources at the problem produced minimal benefits or occasionally negative outcomes for the people concerned. Clearly, there were other powerful mediators at work and a careful investigation led Devitt (1977) to identify another key factor (as well as disease) that mediated the impact of limited resources and the outcomes, especially for people in rural areas. This turned out to be the poverty-generated, self-defeating beliefs of people which led them to narrow their horizons for change. In short, a lack of basic resources not only sapped the energy for physical work (the lay person's explanation) but also closed people's minds to the possibilities, opportunities and the need for change (the mediating psychological variable).

Another example of the importance of the mediating variable (this time from educational psychology) is the all-too-frequently reported link between reading disability and disruptive behavior. In their research which attempted to tease out some of the mediating variables which connects these two problem areas, Willcutt and Pennington (2000) confirmed a gender component (boys with poor reading ability exhibited externalized behaviors like attention disorder, oppositional disorder, and conduct disorder, whilst girls with similar difficulties tended to exhibit internalized behavior, especially depression). While the uncovering of such a gender variable may not immediately seem to be remarkable, this knowledge can alert the teacher to the often hidden effects of reading disability on the emotional well-being of girls (a deeper understanding of the problem), but also indicates that a gender factor should be taken into consideration when approaches to teaching and management are being considered (a more appropriate teaching strategy).

A 'grounded' classroom example might be the child or young person who annoys and disturbs others at work has difficulty staying on-task for more than a few minutes and who seems to have a worryingly-low level of intrinsic motivation. Frequently invoked teacher explanations for such problems may include low

ability, poor home background, or even the suspicion of attention deficit hyperactivity disorder. A more insightful psychological hypothesis might be that this child may believe that he or she can only learn when an adult is giving one-to-one attention and indicating exactly which tasks needed to be done because his or her belief about learning was that it should be an effortless activity (Dweck and Leggett, 1988).

A psychological perspective provides a teacher with a way to 'get hold of' a complex situation and to think about the problem and possibilities in the light of views of human meaning. This advantage is not only afforded by mere knowledge about concepts, principles, and theories; it is only manifested when those ideas are tied together as coherent frames that suggest when and how the ideas can be used (Anderson *et al.*, 1995).

So, one necessary task of the EP practitioner might be to use psychology to challenge what appears to be 'commonsense' or 'common practice' explanations by creating a cognitive dissonance which encourages the consideration of alternative explanations for problems. In the case of the latter, Wagner (1995) has argued that the task for the psychologist is to create this disturbance in a client's current thinking to allow a change of perception to occur and cautions that this new perspective might be resisted or rejected, unless there was an at least some level of congruence with existing perceptions, beliefs or constructs. However, she also points out that changes in perspective do frequently occur and are well recognized across the fields of both theoretical and applied psychology as a cognitive shift, a re-framing/reconstruction of a problem, or the employment of a new hypothesis.

Many of the problems on which applied psychologists are asked for advice present as messy and complex situations which are difficult to unpick, contain information black holes, lack well-established procedures for management and have unclear processes and outcomes. To uncover some of the subtle features that may be underpinning such problems, practitioners require an approach that can bring a systematic and logical analysis to bear on the problem without over-simplifying the real-life complexity of the problem situation (e.g., classrooms are complex, crowded and exceptionally busy places, within which groups of students who differ considerably in interests, abilities, and needs have to be managed), or underestimating the impact (both positive and negative) of human perceptions or

recognizing the vested interests which can lead to clients bringing about or resisting change.

Problem analysis is a process by which information is structured and analyzed in a way that aids a deeper understanding by both client(s) and by the consultant (Monsen *et al.*, 1998). Of central importance in problem analysis is the generation of hypotheses that are based on a combination of psychological research and theory and also on the nature of the problem situation. However, rather than a search for the 'right' single conceptualization of a problem, psychologists using a problem analysis protocol will seek those psychological factors which provide the most plausible and logical representation of the problem and which have higher probability than other 'explanations'. The objective is to provide a 'best fit' which encapsulates the main features of the situation and leads to a clear intervention plan based on evidence-based practice (Cameron and Monsen, 2005; Vinichenko *et al.*, 2019).

For the EP practitioner, the use of a problem analysis protocol ensures that close touch with the knowledge base in psychology is maintained and the often-covert, yet complex and sophisticated theoretical basis which often underpins psychological advice becomes transparent. Much of the time, such high-level reasoning in EP practice remains private and therefore inaccessible to clients, colleagues, and employers, so protocols, like problem analysis, can enable EPs to articulate the often-sophisticated background thinking which underpins their distinctive contribution to the assessment and management of problems. The art of being wise is the art of knowing what to leave out.

1.3. Analysis of evidence-based recommendations

Effective professional advice should go beyond the warm glow of sympathetic support, which seems to meet the practitioner's needs more than the service user's (Gameson *et al.*, 2003). Within the last decade, the central government has made it clear that support professionals in education, in common with other professional groups, must base their practice on the best possible evidence of what works. While evidence-based practice has been an important aspect of psychology for many decades, such an approach has been less obvious in the field of education in general, especially when compared with developments in health services where its influence has been strongly felt.

One outcome of this relatively recent requirement to identify and apply best practice has been the publication of a number of reviews and meta-analyses of psychological interventions (Harrington, 2001; Carr, 2002; Fonagy *et al.*, 2002; Wilson *et al.*, 2003). The international 'Cochrane collaboration' has been providing an updated database of clinical trials and systematic reviews which indicates that interventions have proven effectiveness, while the UK Cochrane Centre in Oxford and the NHS Centre for Reviews and Assimilation in York have specific briefs to review and promote effective practice, particularly for Health Service decision-making. For schools, an Educational Review Group has been set up in the University of London Institute of Education (the EPPI-Centre) where one recent review topic has been behavior management. Some effectiveness reviews from this Group have already begun to appear (Evans *et al.*, 2003). In the case of social, emotional and behavioral difficulties, a service-led summary of general findings and themes emerging from reviews of psychological interventions has been provided by Cameron and Faulkner (Cameron and Faulkner, 2005). Of course, many questions about the effectiveness of different types of psychological intervention with children who have emotional, social and behavioral difficulties remain unanswered; however, a clearer picture of the more effective strategies for change which can be used at a variety of different levels, including the individual child, the classroom, the family, the school and the community, is now beginning to emerge.

While not all researchers and practitioners are professionally comfortable with such an emphasis on outcomes over processes (Lewis, 1998; Connor-Smith and Weisz, 2003), nevertheless there is now general agreement among applied psychologists that the 'best possible evidence' should guide professional practice and advice in health, child-care and education (Frederickson and Cline, 2002). Distinctively, educational psychologists are one of the very few professional groups (and possibly the only one in LEAs) who have specific knowledge and skills in research design, are competent in statistical analysis and who are trained to take a constructively critical stance to research findings in general. In an era when it often appears that the education and social care systems are over-concerned with bureaucratic detail, depressive reality, quick fixes and professional scapegoating, it can often seem that there are severe limitations placed on informed innovation and creativity. Such are the demands

for psychological advice and the increasing administrative pressures to meet statutory deadlines, that it can be only too easy for EP practitioners to miss opportunities for change or lose sight of potential connections between the 'big picture' of children's needs and the research/theoretical knowledge base in psychology which can indicate promising approaches to such problems.

Psychology has long been a powerful force for positive change in our society: its historical contributions to the development of people, in general, have been huge (Zimbardo, 2004). Educational psychology, in particular, has encouraged the growth of significant improvements in early years education, learning and behavior difficulties (especially with regard to specific learning difficulties, autistic spectrum disorder, attention deficit hyperactive disorder), severe learning difficulties and challenging behavior, bullying in schools, friendlessness, critical incident management in schools ... the list is a gratifyingly long one! Harrington (2001) has envisioned 'real applied psychology' as opening people's minds to what they can do, rather than creating the illusion of helping by offering complex explanations for why they cannot do it. A few particular contenders which meet the 'Harrington criterion' (and which the reader might like to supplement) could include the concept of empowerment; resilience and vulnerable children; positive psychology and emotional well-being.

"I cannot keep crying forever. I will try hard, so, someday I hope my child will appreciate she is born ..." (Devitt, 1997). Far better than any scientific review paper could do, this comment from an unknown Japanese mother highlights the importance of giving parents, teachers, care staff and other direct contact personnel, not only the skills but also conferring on them the status/beliefs to be able to intervene positively on behalf of their children. Studies in the area of outcome have shown that there are specific experiences which are central to the outcomes of empowerment, especially the experience of achievement, a sense of being in control of events, hopefulness and optimism, and the experience of both instrumental and emotional support (Epps and Jackson, 2002; Nunkoosing, 2000; Rappaport, 1984).

As well as applying to significant adults in the lives of children, the principle of empowerment can also be extended to the latter group, where self-management approaches can enable the children and young people themselves to take control of their own lives (Doran and

Cameron, 1994; Cameron, 1998). Self-management strategies can also include anger management and self-control. Improving self-management can, therefore, include the teaching of coping skills which children and young people can use at school and beyond, and also helping them to minimize the use of common but self-defeating adolescent strategies such as self-blame, worry and opting-out (Sukhodolsky *et al.*, 2002; Connor, 2002; Faupel, 2004; Lewis and Frydenberg, 2002; Frydenberg *et al.*, 2004).

The concept of resilience, especially in the case of vulnerable children, can be viewed as a combination of those factors which can cushion the child from the effect of negative life experiences, including parental rejection, abuse and neglect and which can enable a child or young person to successfully cope with their life. A resilient child has been succinctly described as one who works well, loves well and expects well, notwithstanding profound life adversity (Werner and Smith, 1982). Fonagy, Steele, Steele, Higgett, & Target (Fonagy *et al.*, 1994) have provided a summary of the research and theory which underpin the concept of resilience, while other writers have suggested how the concept of resilience can be employed with vulnerable children in school (Jackson and Martin, 1998) and in EP practice (Dent and Cameron, 2003).

1.3. Positive psychology

Positive psychology addresses the study of positive aspects of experience with a view to improving the quality of individual and community life. It encompasses such diverse topics as well-being, joy, the psychology of happiness, flow and optimal experience, personal stress, wisdom, creativity, imagination, well-being in old age and characteristics of positive groups, institutions and communities (for further details see the seminal article by Seligman and Csikszentmihalyi (2000)). The main themes of positive psychology are the positive experience (what can make one experience better than another); the positive personality (what can make one individual happier than another); and the positive context (what can make one environment more enabling than another) (Seligman, 2002). Of particular interest to EPs is the concept of 'flow' or 'optimal experience' which is an emotional state characterized by complete and timeless involvement in a task, accompanied by intrinsic motivation and self-satisfaction (Csikszentmihalyi, 1997). Creating the conditions whereby disaffected pupils can obtain flow experience in the classroom presents a creative challenge to

psychologists and teachers alike, but could provide a reluctant learner with the opportunity to sample the joys, rather than the frustrations, of learning.

Although this particular development in psychology is still in its early stages, there are exciting possibilities here to support the initiative on promoting children's mental health within early years and school settings, by focusing proactively on the enhancement of the emotional and personal well-being of children and young people, rather than relentlessly pursuing a reactive response to problems when these have been well established. Big ideas like empowerment, resilience and the creation of emotional well-being are intrinsically, excitingly seductive, can provide deeper insight into familiar situations and are likely to revive positive feelings about the tasks in hand. Above all, they can rekindle the sometimes submerged enthusiasm and high aspirations of direct contact staff.

The distinctive dimension of these and other big ideas lurking around in the contemporary psychology knowledge base is that they have got strong foundations in applied research, rather than being merely based on the more traditional antecedents (e.g., anecdotal evidence, feel-good speculation or a belief that surely it must do some good) which appear to underpin so many new initiatives in education today.

2. MATERIALS AND METHODS

2.1. Analysis of the study to identify the professional qualities of students

Summarize the data discussed in the Experiment assessed professional and psychological development of the student's personality. Object of the research: 90 students of the "Turan-Astana" university at the age of 17-22 participated in the study. Methods of psychological research:

- 16-factor test of Cattell (type);
- Modified methodology of John Holland's profession selection survey;
- As a basic method of research, a non-standardized interview was conducted on the theme "The level of professional development of a person".

Multiple-factor research of individuals. Cattell's survey.

Purpose: This survey is designed to explore sixteen individual factors and it gives a lot

of information about the individual's personality as constitutional factors.

This survey consists of 187 questions. It is recommended to write one of the answer options "no", "yes", "do not know" on the registration form. Note: You are asked to answer several questions. The aim is to find out about your behavior, your interests, and the skill. There are no questions with "correct" and "wrong" answers. Various researched people are asked to answer questions depending on their distinctive features. If you want to find out suggestions and information about the distinctive features that describe your character in various situations, try to give precise and realistic answers. When answering questions, you choose one of the three options. The number of answers on the blank must match the number of queries. By choosing the option "a", you mark the left square, if you select the option "b", then you mark the middle one and if you choose the option "c", you select the right square.

Remember by answering:

- Questions are very short. Therefore, imagine yourself in the light of the content of the question and do not stop on each small things.
- Do not spend a lot of time thinking. Answer what comes first to your mind.
- Try to answer several questions in 1 minute. Then you will finish answering the test in 35 minutes.
- Try to avoid unclear responses that come to your mind suddenly.
- Do not skip any question. You should answer all questions.
- If you have some questions that cannot be linked to your own behavior, try to give more concise answers. Do not try to look good with your own answers. Show your thoughts in a freeway.

The second method in our study is a modified methodology of John Holland's profession selection survey. The methodology is a typological study of the person, the test is developed by John Holland (Holland *et al.*, 2005). The stimulating material of the test is unique to similar questionnaires and consists of 40 dichotomic alternatives, each of which is presented in a specific profession. The researched person needs to choose one of these. In other words, he/she has to answer the hypothetical question. On the psychological basis of the specialty used in the test, the author assigned 6 scales to 6 person types: realistic; research; artistic; social; business; conventional.

Each type corresponds to 14 professions. It equates scales to quantities and allows to compare clarity of any type in all researchers.

The key.

1. Realistic: 1,2,3,4,5,16,17,18,19,21,31,32,33,34 – all A.
2. Research: 1B, 6A, 7A, 8A, 9A, 16B, 20A, 22A, 23A, 24A, 31B, 35A, 36A, 37A.
3. Artistic: 5B, 9B, 12B, 14B, 15B, 19B, 21B, 24B, 27B, 29B, 30B, 34B,41A,42B.
4. Social: 2B, 6B, 10A, 11A, 12A, 17B, 20B, 25A, 26A, 27A, 36B, 38A, 39A, 41B.
5. Business: 4B, 8B, 11B, 13B, 15A, 23B, 26B, 28B, 30A, 33B, 35B, 37B, 39B,40B.
6. Conventional: 3B, 7B, 10B, 13A, 14A, 18B, 22B, 25B, 28A, 29A, 32B, 40A, 42A, 38B.

Characteristics of types:

1. Realistic – non-social, emotionally stable, and chivalrous people who are focused on the current. This type deals with specific objects and ways how to use these objects. It wants to engage in activities that need motor skills, flexibility, and accuracy. People of this type choose a profession that needs precise action: electrician, mechanic, etc. This type of people is characterized by non-verbal mathematical abilities.
2. Research – workaholic, non-social, precise, independent, ingenious, they like to solve tasks that require abstract thinking and prefer scientific professions such as botany, astronomer, physicist, etc. This type is intelligent, whose both verbal and non-verbal abilities are highly developed.
3. Artistic – complex approach to the world and life, flexibility, originality, independence in decision-making, a distinctive feature than surrounding people. In relationships, it relies on their own sensations, emotions, imagination, and intuition. People of this type like to engage in activities with creative nature. Their verbal abilities are superior, but not always. Motor and perception abilities are high. They dream high even when they are young and are characterized by an accent given on their "I".
4. Social type sets goals and opportunities that allow them to communicate with the surrounding environment. It has a social skill and needs social connections. The main characteristics are intercourse, aspiration to education and upbringing, humanism, tenderness, psychological orientation to man. Activities that this type likes are teaching and treatment. Specialties that fit this type are doctors

and psychologist. It tries to keep away from intellectual issues. It solves problems by focusing on emotions, feelings and communication skills. It is depended on the group and surrounding views, it is active. Verbal abilities are developed better than non-verbal abilities.

5. Business type chooses goals, values, and goals that can demonstrate their power, enthusiasm, intensity, precedence, and love for adventure. It wants a leader role and only then, meets its need to gain recognition of others. It is a manager, director, journalist, reporter, artist, diplomat, and sales managers. He does not like handicapped activities, activities that require concentration and intellectual effort. Desirous of verbally-guided tasks with leadership and authority. Aggressive, like to maintain the line of management.

6. Conventional type is characterized by a wish for clearly defined activities and they like to be managed. It adheres to traditions and traditional views and its attitude towards problems has stereotypical-practical and clear properties. Characteristic features: rigid, conservative, dependent. It likes jobs related to office and accounting. Engagement skills are well developed. Non-verbal mathematical talents are good. The weak organizer and leader, their decisions depend on the opinions of others and surrounding people.

Our research was conducted between 2016 and 2018, and its results were compared. The study included 90 students at the age of 17-22 from Turan-Astana University, who are studying at the 1st and 4th courses. It is classified by the following specialties: Pedagogy and Psychology, Psychology. The main criteria for dividing research objects into groups was their specialization.

3. RESULTS AND DISCUSSION

As a result of the research, the following became known:

1. Factors influencing the choice of a profession were found: level of professional plan formation; interest and information levels of the chosen specialty; motives of professional self-definition of students.

2. The main motives of professional development and learning;

3. Determining the degree of readiness for professional activity: the main motives of

professional activity; realistic level of expectations of postgraduate education; level of professional mobility; the degree of professional attractiveness of the researchers.

4. The impact and relationships between the professional and personal development of the objects of the research;

5. During studying research groups, some difficulties were identified and its dynamics was examined.

Difference between the groups of students who were included in the study on these indicators was determined. In our study, the relative performance parameters of the 1st and 4th-year students are as follows.

1. In the majority of 4th-year students (78.6%), we can notice that an intermediate type of professional plan is formed. The exact type is typical for specialty groups only. According to the groups participated in general study 21.2% show a specific type. These results are shown by the results of the study. Most students in the 1st year demonstrate the intermediate type of life plan; 24.5% and 21.0% of students have real-life plans. Detected data indicate that the self-determining process of young people takes a long term (Figure 1).

So the difference between the two groups can be calculated by using the t criterion of the Student (Equation 1):

$$t = \frac{X^1_{ap} - X^2_{ap}}{\sqrt{m_1^2 + m_2^2}} \quad (\text{Eq. 1})$$

where X^1_{ap} is an arithmetic meaning of the first statistical group; X^2_{ap} is an arithmetic meaning of the second statistical group; m_1 is an error of the arithmetic average meaning of the first statistical group; m_2 is an error of the arithmetic average meaning of the second statistical group. In determining the difference between the arithmetic average meanings of two groups, parameter $t_{эм}$ is 3.2, i.e. $t(3,2) > t_{0,01}(2,639)$, so the difference between the arithmetic average meanings of two statistical groups is statistically significant.

2. Also among the 1st year students, 64.3% students show a medium degree of interest in the selected profession, only 28.2% (on profession TOURISM) show a high degree of interest (7.3%), and among the 4th year students, a medium degree has 75.2%, and a high degree is 24.8% (Figure 2). In determining the difference between the arithmetic average meanings of two

groups, parameter $t_{\text{эм}} 2.9$, i.e. $t(2.9) > t_{0,01}(2.639)$, so the difference between the arithmetic average meanings of two statistical groups is statistically significant.

3. The degree of information awareness on the selected profession is noticed among the students of the profession TOURISM and Psychology, but students of Psychology are aware less. These parameters show that 16% of the results of the study in real terms for students of the 1st year have a high degree of awareness, 33.6% – a medium level and 50.4% – higher than low parameters. Thus, the reason for the high level of awareness among high school pupils is related to the increase in the quality of professional campaign work (Figure 3).

4. External factors influence mostly the choice of profession of respondents. 35.7% of respondents (biologists and pedagogues-psychologists) are motivated by their parents and close relatives, and 35.7% (other psychologists) are motivated with the need to address their own and relatives' problems, and 28.6% (TOURISM) are interested in the profession that they have chosen. These results show that the impact of parental influence on children's future profession is reduced (Figure 4).

5. For our first-year students (71.4%), there is a tendency of indirect motives of study and professional development; only 28.6% (biologists) are the direct motives. Direct motives include "creative work or research" (a cognitive motive group), and among indirect motives, there are the motive for being a professional in their profession prevails (achievement motives group). In contrast, the 4th year students have mostly a direct motivation that is 56% while indirect motives are 44% (Figure 5).

In determining the difference between the arithmetic average meanings of two groups, the parameter $t_{\text{эм}}$ is -3.6, i.e. $t(3.6) > t_{0,01}(2.639)$, so the difference between the arithmetic average meanings of two statistical groups is statistically significant.

6. For 71.4% of our 1st-year students, the indirect motive of education and professional development prevails; only 28.6% of the direct motives are the priority. Direct motives include "creative work or research" (a cognitive motive group), and among indirect motives, there are the motive for being a professional in their profession prevails (achievement motives group). In contrast, the 4th year students have mostly a direct motivation that is 56% while indirect motives are 44% (Figure 6). In determining the

difference between the arithmetic average meanings of two groups, the parameter $t_{\text{эм}}$ is -3.6, i.e. $t(3.6) > t_{0,01}(2.639)$, so the difference between the arithmetic average meaning of two statistical groups is statistically significant.

7. For 71.4% of the 1st year students in the studied group, the prevailing influence is an external positive motivation in professional activities. Motivations for personal development of students in the profession of pedagogy-psychologist: "expanding own views", "possibility of intellectual and spiritual growth and social motives: "to help others", "to be useful for the society, etc. The motives of achievement of biologists: "to become a professional in own profession", "to have a well-paid job", "to achieve a certain status", and 28.6% (TOURISM) have prevailing inner motives. In addition, the 4th year students with a high level of internal motivation are 68%, and those whose external motives are 32% (Figure 7). In determining the difference between the arithmetic average meaning of two groups, the parameter $t_{\text{эм}} 2.8$, i.e. $t(2.8) > t_{0,01}(2.639)$, so the difference between the arithmetic average meaning of two statistical groups is statistically significant.

8. True expectations after graduation of the higher education. 35.7% of the 4th year students are characterized by high realistic expectations, 21.5% have lower, and 42.8% have medium expectations. For the 1st year students, medium is 81.1%, and 10.3% is higher, and 8.6% is lower. In determining the difference between the arithmetic average meaning of two groups, the parameter $t_{\text{эм}}$ is 3,1, i.e. $t(3,1) > t_{0,01}(2.639)$, so the difference between the arithmetic average meaning of two statistical groups is statistically significant (Figure 8).

9. A profession mobilization capacity. All 42.8% of the 4th year students have a high profession mobilization capacity, 35.7 % show medium, and 21.5 % show levels of this capacity. 1st-year students: Most students have 62.1% of medium, 22.4% – low, 14.5% – high level of the capacity (Figure 9). In determining the difference between the arithmetic average meanings of two groups, the parameter $t_{\text{эм}}$ is 2.9, i.e. $t(2.9) > t_{0,01}(2.639)$, so the difference between the arithmetic average meanings of two statistical groups is statistically significant.

10. In the 4th year course 35.7% are characterized by a high professional level, 42.8% – medium and 21.5% – low. This result is based on the average of 70% for the 1st year students, 29.4% – low and 1.3% is for the highest level

(Figure 10). In determining the difference between the arithmetic average meaning of two groups, the parameter t_{3M} is 4.3, i.e. $t(4.3) > t_{0,01}(2,639)$, so the difference between the arithmetic average meanings of two statistical groups is statistically significant.

11. Each student of the considered group is distinguished by the peculiarities of interconnection and interactions in the processes of personal and professional development. For example, biologists and psychologists are interconnected closely with these processes. However, for the students of the psychology profession the key factor is self-fulfillment and personality development, and it is accompanied by personal development. Professional development is one of the few attempts to pursue psychological development on the one hand and, on the other hand, there are only several directions of realization of a psychologist. However, students in the profession biology, on the contrary, have a clear differentiation of professional and personal development. Professional development and prospects of acquiring a certain status, increasing the material wellbeing and so on is only a tool. Thus, professional activities and possible career achievements are the priority for the biological respondents.

Each student passes the following stages in the formation of his/her personal and college student status: adaptation; socialization; creation of a different age society.

4. CONCLUSIONS:

As educational psychologists become clearer about their distinctive contribution in the changing world of early childhood, school-age and post-16 developments, their respective work with children and young people is, paradoxically, likely to become both richer and broader, rather than narrow and introverted. Indeed, when EPs begin to draw more heavily on their own knowledge base in contemporary psychology, previously obscured connections with other disciplines begin to emerge, as the following possibilities illustrate:

- Closer links between educational psychology and clinical neuropsychology.
- Improved collaborative practice involves helping teachers and careers to support children who are experiencing bereavement, be it through the death of a loved-one or parental break-up.

- A reduction in the number of young people involved in crime or who become victims of crime through psychological input into youth offending projects.

- Multidisciplinary collaboration for children with autism.

- Improved childcare practice which promotes the concept of 'authentic warmth' in residential and foster homes for looked-after children.

- Improving services for young people in the light of the rediscovered link between insecure attachment and later violence.

Applied psychology can, therefore, help people to understand themselves and others, enable them to maximize developmental opportunities and encourage them to recognize/celebrate diversity among people. Psychology is concerned with understanding how individuals and groups learn and develop and how this informs the development of society: most certainly, it is not about putting people into pigeonholes or labeling people, even though it has often been employed for this purpose. Part of the power of psychology stems from the fact that it draws upon a research and theoretical knowledge base which seeks to understand the complexity of human experience and eschews simple answers to complex questions

Similarly, applied psychologists who identify with the claim of Gale, that psychology is possibly the most powerful force for positive change in human development, are also likely to believe that the benefits of the discipline cannot be restricted to a few people only. In the case of educational psychology, the delivery of high impact, educational and child psychology services in the future will encourage EPs to move away from an over-involvement with both schools and special educational needs and also to develop the confidence in their discipline to challenge mundane and often marginal administration duties, currently demanded by LEAs. Instead, EPs of the future will be required to develop a distinctive professional role and a secure identity which will allow them not only to benefit many more children and young people and the significant adults in their lives but also to ensure that psychological research, theory, and practice is at the forefront of local and national decision making.

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Figure 1. 1st and 4th year students. Relative percentage ratio of students' professional plans

Figure 2. Percentage of students of 1st and 4th year students' interest in their chosen specialty

Figure 3. Indicators of 1st year students on selected specialties

Figure 4. Indicators of the basic motivational factors of the students in the chosen specialty

Figure 5. Study and professional development of the 1st and 4th year students' relative indices of motives

Figure 6. Comparison of the level of formation of direct and indirect motives of the 1st and 4th year students in the specialty

Figure 7. Comparison of the level of formation of the internal and external motivation of students of the 1st and 4th year students in the specialty

Figure 8. Comparison of the level of students' expectations after graduation from the 1st year and 4th year students

Figure 9. Comparative performance indicators of the 1st and 4th year students' professional concentration levels

Figure 10. Comparative indicators of the level of professional success of the 1st year and 4th year students