

# Assessing Personality-Related Learning Outcomes in Master Programs

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**Abstract.** In this article, personality-related learning outcomes in educational psychology Master's programs are analyzed as professionally relevant personality traits, of which personal and professional identity are the core. An empirical study involved students enrolled

in educational psychology Master's programs (60 in the first round and 35 in the second one). The study used Lydia Schneider's personal and professional identity diagnostic methods, L. Michelson's communicative competence test adapted by Yuri Gilbukh, and Mehrabian and Epstein's empathy scale. The results showed that Master's degree students experienced significant changes to their professional identity in the course of studies, making considerable progress in the development of communicative competence and empathy. Professionally relevant personality traits were found to show irregular dynamics during the first and second years of Master's studies. The article outlines avenues of further research on educational and psychological assessment of personality-related learning outcomes in Master's programs.

**Keywords:** assessment of personality-related learning outcomes, Master's degree students, professionally relevant personality traits, professional identity, communicative competence, empathy.

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System-level assessments have become an important area of research in educational sciences. Present-day models for the evaluation of university effectiveness are based on combinations of input and output criteria, such as graduation rate [Abankina et al. 2013]. Much value is attached to longitudinal studies as a tool for increasing effec-

tiveness of educational institutions and of the national education system as a whole [Navodnov, Motova, Ryzhakova 2019]. Transition of university education to a competency-based framework, which implies projection of learning outcomes, adds a particular relevance to research aimed at designing programs for monitoring performance of all kinds, including personality-related learning outcomes. University education cannot be effective without monitoring the formation of students' personality-related learning outcomes, first of all because it won't be able to deal with the present-day anthropological challenge. The snowballing flows of information, the never-ending upgrades of information technology in all spheres of life, the dynamism of social life, and the high level of psycho-emotional strain at work require improving and maximizing the human potential of every human being.

University education cannot be restricted to transfer of knowledge to rising generations and to teaching them modern competencies and cognitive skills. Its purpose is bigger and consists in creating a human being in all the integrity of human manifestations: as a subject of one's professional activity, as a socially active and responsible person, and as a creative personality [Isaev 2017]. Holistic evaluation of university effectiveness is impossible without assessing the level of graduates' professionalism, of which professional identity is the core.

Educational researchers are actively searching for effectiveness criteria. A lot of studies have used end-of-program evaluations to assess educational effectiveness [Curby et al. 2020]. Today, however, more and more attention is paid to the process of achieving personality-related learning outcomes, which is reflected in new mid-program evaluation projects [Murat Sozer, Zeybekoglu, Kaya 2019]. Other indicators of educational effectiveness include students' expectations of university education [Ivanyushina, Alexandrov, Musabirov 2016], their evaluations of its usefulness for career success [Tuononen, Parpala, Lindblom 2019], and their satisfaction with the learning process [Borch, Sandvoll, Risør 2020].

International researchers explore the criteria for assessing professionalism as the main learning outcome in university education [Hamilton 2017], regarding professional identity as the foundation of professionalism, especially in human interaction professions. A considerable amount of research has been focused on professional identity formation in medical students [Houseknecht et al. 2019]. Furthermore, there are findings on the professional identity of teachers [Fadie et al. 2020] and novice counselors [Katalinic 2018]. Remarkably, studies on professional identity formation in medical workers still rely on the theoretical model proposed by George E. Miller [Miller 1990], although a number of modifications have been suggested by present-day scholars [Cruess et al. 2015]. This model is built around the idea that professional identity is formed by "merging" with the profession and following all the way from knowledge to action. This approach is in line with the concept of professional identity proposed by Lydia Schneider,

who defined professional identity as “objective and subjective oneness with the profession and professional community, which provides for continuity of an individual’s professional characteristics (norms, roles, and statuses)” [Schneider 2007:64].

Therefore, the recent years have witnessed a growing interest in using personality-related learning outcomes to assess the quality of university education. It would be appropriate to say that significance of such studies is not restricted to the design of tools for monitoring students’ personality-related learning outcomes. Development of agency as a prerequisite and outcome of professional education [Isaev 2017] requires in-depth analysis.

Cultivation of professionally relevant personality traits should be the focus when preparing human interaction professionals in Master’s degree programs. High requirements to the level of professionally relevant personality traits among teaching staff (teachers and educational psychologists) stem from the obvious expectation that soon-to-be experts should possess the qualities that they will cultivate in their students.

A large-scale experiment on the modernization of teacher education carried out in 2014–2017 by a research team from Moscow State University of Psychology and Education allowed substantiating a model of continuing teacher education and a generalized competency-based model of an educational psychology graduate as well as developing guidelines for the main teacher education programs in accordance with the professional standards and the Federal State Education Standards of Higher Education (FSES HE) 3++ [Rubtsov, Guruzhapov, Makarovskaya, Maximov 2014; Margolis, Safronova 2018]. Many of the strategies proposed for modernization of teacher education later became part of various projects and plans. At the same time, directions for improving the quality of education programs have become obvious over the past years. A top priority in the modernization of Master’s degree programs is to consider the context in which personality-related learning outcomes of educational psychology Master’s students are formed. Significant frame-of-mind differences between students obtaining their first vs. second academic degree have been reported [Ermolaeva, Lubovsky 2015]. However, there has been little research on the formation of professional agency, which is based on the concept of professional identity, in the course of Master’s studies.

### **Methodology and Procedure**

The goal of research was to analyze the development of professionally relevant personality traits of students in educational psychology Master’s programs, which was expected to have irregular and contradictory patterns. The two-round study involved Master’s degree students at Moscow State University of Psychology and Education. Both rounds used Lydia Schneider’s personal and professional identity di-

agnostic methods, L. Michelson's communicative competence test adapted by Yuri Gilbukh, and Albert Mehrabian and Norman Epstein's empathy scale.

Professional identity diagnostic method is an association test designed to determine the status of professional identity (foreclosed, diffused, achieved, pseudo-positive, and moratorium). The method is based on the framework proposed by Lydia Schneider. Since professional identity is regarded as a personality-related phenomenon, it should be studied in conjunction with personal identity. Personal identity diagnostic method also represents an association test that measures the identical statuses of personal identity. The method is based on Schneider's interpretation of the construct: "Personal identity is self-referentiality, i. e. the sense and perception of the uniqueness of / in its existence and individuality of personality traits, while feeling as part of social reality" [Schneider 2007:64]. Mehrabian and Epstein's empathy scale was used to monitor changes in students' empathy, and Gilbukh's adaptation of Michelson's communicative competence test was used to measure changes in communicative competence.

The first round involved 60 students (20 in the 2nd year and 40 in the 1st year) in Educational Psychology Master's programs. The second round involved 35 Master's degree students aged 23 to 42 (26 women and nine men). Five assessments were administered for the whole period: in November 2017 (at entry), February 2018 (end of the 1st semester), June 2018 (end of the 1st year), January 2019 (end of the 3rd semester), and April–May 2019 (end of the program). Data was collected by means of questionnaires distributed among groups and analyzed using the SPSS23.0 software package.

**Results** Results of the first round were published earlier [Ermolaeva, Isaev, Lubovsky 2020]. The most important findings include the relatively low percentage of graduands with achieved professional identity (35% of the total sample) and achieved personal identity (15% of the total sample) as well as the prevalence of diffuse and pseudo-positive personal identity statuses, characterized by reluctance to change, a low level of reflection, and a positive overall self-concept. The present publication zeroes in on the results of the second round of the study.

Professional identity status is regarded here as one of the most important personality-related learning outcomes. Table 1 presents data on the changes in professional identity status.

Statistical analysis shows that differences among the assessments are insignificant ( $\chi^2=20.379$ ;  $p=0.204$ ), but the distribution changes essentially between the 1st and the 3rd assessments (Table 2).

Changes in the professional identity status distribution between the 1st and the 3rd assessments, i. e. during the 1st year of Master's studies, are statistically significant ( $\chi^2=9.822$ ;  $p=0.044$ ). In other words, the most widespread professional identity statuses at the end of the

**Table 1. Changes in professional identity status during Master's studies.**

Assessment	Professional identity status					Total
	Foreclosed	Diffuse	Moratorium	Achieved	Pseudo-positive	
1	9	8	6	9	3	35
2	5	9	11	5	5	35
3	3	10	12	3	7	35
4	3	12	12	5	3	35
5	3	14	5	9	4	35

**Table 2. Changes in professional identity status during the 1st year of Master's studies.**

Assessment	Professional identity status					Total
	Foreclosed	Diffuse	Moratorium	Achieved	Pseudo-positive	
1	9	8	6	9	3	35
3	3	10	12	3	7	35

1st year were diffusion, "...in which an individual has no definite commitments and does not engage with exploring their identity" [Schneider 2007], and moratorium, characterized by active attempts to overcome the crisis of professional identity and by a level of exploration typical of people with achieved professional identity. By the end of Master's studies, achieved professional identity status becomes more common (nine graduands), but diffusion gains the overwhelming majority (14).

Changes in personal identity during Master's studies are also of great interest as an indicator of formation of personality-related learning outcomes (Table 3).

No significant differences in data from five assessments were revealed ( $\chi^2=15.584$ ;  $p=0.482$ ). Remarkably though, diffused identity and moratorium statuses prevail at the beginning of the studies. Master's students with achieved and moratorium personal identity status become the largest groups (10 students in each) at the end of the 1st year, i. e. when moratorium and diffusion statuses come to prevail in professional identity. By the end of Master's studies, the highest percentages in the distribution belong to moratorium, diffused, and pseudo-positive identity statuses (10 students in each group).

A noticeable surge is observed in the development of empathy as a professionally relevant trait (Table 4).

**Table 3. Changes in personal identity status during Master's studies.**

Assessment	Personal identity status					Total
	Foreclosed	Diffuse	Moratorium	Achieved	Pseudo-positive	
1	4	11	11	4	5	35
2	4	9	12	4	6	35
3	1	7	10	10	7	35
4	1	8	14	8	4	35
5	2	10	10	3	10	35

**Table 4. Changes in empathy during Master's studies**

Assessment	Level of empathy				Total
	Very high	High	Normal	Low	
1	1	9	23	2	35
4	10	24	1	0	35

During Master's studies, the most prominent differences in the distribution among levels of empathy are observed between the 1st and the 4th assessments ( $\chi^2 = 36.348$ ;  $p = 0.000$ ), although the largest increase in the total score on Mehrabian and Epstein's empathy scale occurs between the 1st and the 2nd assessments ( $U_{\text{эмпн.}} = 154.5$ ;  $p = 0.01$ ). Finally, another essential shift in the formation of professionally relevant traits in prospective educational psychologists was revealed in communication skills. According to the results of Michelson's communicative competence test, students make a significant progress in responding competently to interlocutor's provocative behavior ( $\chi^2 = 17.9048$ ,  $p = 0.00046$ ), situations when they have to say no ( $\chi^2 = 11.8182$ ,  $p = 0.008$ ), and contact attempts by others ( $\chi^2 = 8.837$ ,  $p = 0.03$ ), which on the whole indicates a progressive trend in the development of students' communication skills during Master's studies.

**Discussion** The results obtained in this study confirm and elaborate essentially the findings of the first round, first of all with regard to the levels of professional and personal identity at different stages of education. The cumulative sample of both rounds consisted of 95 participants. Limitations of research are associated with a small sample size and a focus on Master's programs alone. Nevertheless, analysis results allow making some important inferences about the formation of personali-

ty-related learning outcomes in educational psychology Master's programs. Our years-long observations show that people often pursue Master's degrees hoping to find a way out of their personal development crisis. Those observations are confirmed by the small percentage of 1st-year Master's students with achieved personal identity as well as by the changes in personal identity status (see Table 1) during Master's studies. A decline in the prevalence of achieved identity status by the end of the 1st year and an increase in its prevalence among graduands are very likely to indicate the process of losing the old professional identity and finding a new one. This pattern is dissymmetric to that of the percentage of students with achieved personal identity (see Table 2). Chances are, a lot of students unwittingly substitute searching for a new professional identity for finding a new personal one. If that is the case, academic and psychological support is needed most of all at the end of the 1st year, targeting at reflection of positive changes in professional growth, and at the end of the program, targeting at how a student's personality has changed in the course of studies.

Improvements in communicative competence and empathy skills are what is considered as positive learning outcomes in Master's degree programs. On the whole, it is not inappropriate to say that Master's programs are effective for the development of professionally relevant personality traits in prospective educational psychologists. However, for this system to become even more effective, students should be provided academic and psychological support while nurturing their professional identity and finding their new personal identity. Such support may include well-established modern university education practices (reflection seminars in every module, portfolio method, individual and group counseling) as well as formative assessment of personality-related learning outcomes [Norcini, Shea 2016] and psychological support for recent graduates [Ponce et al. 2019] that are extensively used in training of practicing psychologists in the west.

**Conclusion** The study shows that Master's studies, on the whole, contribute to the formation of personality-related learning outcomes. In the course of educational psychology Master's programs, students make considerable progress in the development of communicative competence and empathy. These changes can be explained by the structure of educational psychology Master's degree programs, which widely use cooperative learning practices, thus setting a high standard for communication skills in general and listening in particular.

The hypothesis on irregular and contradictory patterns in the development of professionally relevant personality traits in the course of Master's studies was confirmed. Findings allowed identifying the stages of Master's degree education at which students need academic and educational support most of all: the end of the 1st year and

the end of the program. Probably, the practices of formative assessment [Hortigüela Alcalá, Palacios Picos, López Pastor 2019], dialogic feed-forward [Hill, West 2020], and in-semester assessment of academic performance as a function of motivation and self-regulation [Kickert et al. 2019], extensively used in tertiary education abroad, should be adopted by Master's degree programs in Russia—not for the purpose of controlling and evaluating the development of learning outcomes but as tools for getting feedback from students in order to give them timely support. The diagnostic procedure proposed here can be applied in longitudinal studies aimed at enhancing educational effectiveness.

The findings obtained in this study allow outlining hypotheses and avenues for further research. It is yet to be tested whether Master's degree students unwittingly substitute finding a new professional identity for finding a new personal one. Another assumption that needs to be verified is whether academic support for students in Master's programs actually reduces the risk of crisis during studies and contributes to the formation of achieved identity, both professional and personal.

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