# THE CONCEPTUAL MODEL OF CONTENT ANALYSIS OF APPLICANTS' INTERNAL MOTIVATION IN ENTRANCE ESSAYS

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**Abstract.** The article discusses the methodological foundations and the sequence of developing a model for assessing the internal motivation of applicants to the master's program in "Business Pedagogy" at MGPU. An analysis of sources revealed that approximately 30% of students in higher education institutions in various countries do not complete their studies. Research confirms that one of the contributing factors is a low level of intrinsic motivation among applicants and students in general. The ability to identify internal motivation at the selection stage can help reduce the number of students dropping out during their studies. Within this work, the author developed and proposed a conceptual model and an assessment method based on analyzing entrance motivational essays.

*Keywords:* motivational essay; internal motivation; structure of internal motivation; conceptual modeling; conceptual model of internal motivation; content analysis of internal motivation in the texts of entrance essays of master's applicants

## Problem

Recent studies worldwide over the past few years reveal a consistent trend: a significant portion of students beginning their master's studies do not complete the program. Statistical data from various countries indicate that the completion rate for master's programs is approximately 70–80%, meaning that about 20 – 30% of students do not reach the final stage. These figures vary slightly depending on the country and region. For example, the European University Association (EUA,2021) notes that in Europe, roughly 20 – 35% of students have academic debts or do not complete their master's degree within the prescribed timeframe. International reports from OECD (2022) show that in European and North American countries, around 25 – 30% of students, for various reasons—from personal circumstances to academic difficulties – do not finish their studies. In the United States, dropout and interruption rates among master's students can reach about 30%, while in European countries, they are around 20 – 25% (EUA 2021; OECD 2022).

According to the Ministry of Education and Science of the Russian Federation (2021), the situation in Russia is similar: the completion rate for master's programs is approximately 70–75%. This means that about a quarter to a third of students, for various reasons such as changing professional directions or needing to take a break from studies do not finish their education (Ministerstvo nauki i vysshego obrazovaniya RF 2021).

A similar pattern has been observed in the "Business Pedagogy" master's program at Moscow City University (MGPU) over the past eight years: depending on the year of graduation, "losses" amount to about one-third of the total intake. This situation is objective and causes concern.

### Reasons

What key reasons for the non-completion of a two-year master's program can be identified from international research? They clearly demonstrate that low motivation, lack of specific goals in studies and career, as well as insufficient understanding of the chosen specialization by applicants, significantly increase the risk of dropping out of graduate studies (Li & Wang 2022; Mayring 2014; Ryan & Deci 2000a). One of the main reasons why students do not complete their master's degree is considered to be low motivation, both intrinsic and extrinsic.

Intrinsic motivation is understood as the desire to learn for personal development, interest in the content of studies, and the need for professional growth. Research shows that students with high intrinsic motivation are more likely to successfully complete their master's programs because they are more resilient to difficulties and have a strong desire to achieve their goals (Li & Wang 2022; Mayring 2014; Ryan & Deci 2000a). Extrinsic motivation, on the other hand, is usually associated with the desire to obtain a diploma to improve employment prospects or at the request of an employer, and is often a motivating factor for enrolling in a master's program.

However, as several studies have shown, external motivation combined with insufficient internal motivation leads students to quickly lose interest and drop out, especially when various barriers arise – including cognitive (lack of clear goals and understanding of professional orientation), psychological (fear of failure or low self-esteem), social (lack of support from family and employer), pedagogical (lack of support from instructors, inflexible study schedules, weak individualization of the learning process), and financial difficulties (Mayring 2014).

Thus, the results of conducted research directly indicate that internal motivation can be considered as a predictor or determining motivational factor that helps overcome difficulties encountered during studies and guides goal-setting towards completion.

It also seems necessary to note that internal motivation can be viewed not only as a predictor of continuation and completion of the learning process but also as a

predictor in decision-making about enrolling in a master's program at the stage of submitting documents to the university and writing the entrance essay.

**Hypothesis**

It can be assumed that internal motivation of master's program applicants is most clearly expressed in the content of the motivational entrance essay and can be considered as one of the factors facilitating the overcoming of cognitive, psychological, social, pedagogical, and even financial difficulties during the learning process. In turn, internal motivation plays an important role in the successful completion of the student's educational program.

The aim of the research is to determine the potential of the entrance motivational essay as a subject for analyzing internal motivation and long-term learning goals of master's applicants, particularly applicants to the "Business Pedagogy" master's program at MGPU.

**Research objectives**

1. To define the methodological and conceptual foundations for identifying internal motivation and long-term learning goals of master's program applicants.

2. To develop an analysis tool for assessing the internal motivation of applicants to the "Business Pedagogy" master's program at MGPU as a predictor of successful learning outcomes and program completion.

**Research Methodology**

To develop the methodological and conceptual foundations aimed at identifying internal motivation and long-term learning goals of master's applicants, the authors relied on the following theoretical approaches:

1. A.N. Leontyev's Theory of Labor and Educational Activity.

This renowned psychologist and theorist of activity-based approaches emphasized the study of motivation as a complex system of internal meanings, goals, and values that determine personality orientation and activity. Leontyev highlighted that internal motives and preferences shape an individual's choices, the nature, and content of their activities, as well as influence success in learning and professional development (Leontiev 2005).

2. Self-Determination Theory (Autonomy) by R. M. Ryan and E. L. Deci.

The authors consider three innate basic needs that underpin internal motivation:

2.1. The need for self-determination (autonomy), feeling like an initiator of one's actions and having control over them;

2.2. The need for competence – striving for effectiveness and results;

The need for relatedness — interaction with others (Ryan and Deci 1995, 2000a, 2000b, 2017; Ryan, Deci, Vansteenkiste and Soenens 2021)

3. Research shows that intrinsic motivation promotes greater persistence, resilience in overcoming difficulties, initiative, and creativity.

**Methodological Foundations**

For analyzing internal motivation and long-term goals of applicants to the "Business Pedagogy" master's program at MGPU, content analysis was chosen – a widely used method for qualitative and quantitative analysis of texts based on identifying key words and phrases (Vinohodova 2015; Pashinyan 2015; Tarshis 2012; Krippendorff 2018; Kuo & Chiu 2021).

The structure of content analysis according to M. Bengtsson includes four main stages:

1. Decoding – extracting meaningful units from the original texts;

2. Recontextualization – adapting these units to fit the research objectives within their context;

3. Categorization – organizing elements into systematic groups;

Compilation – presenting the analysis results in a new structured form (Bengtsson 2016).

4. The purpose of applying content analysis in this study was to develop a conceptual model for analyzing internal motivation expressed in applicants' entrance essays.

**Features of Motivation Assessment**

Within the total score for the motivational essay – 200 points – the motivational component accounts for 40 points. This part can have a decisive influence during the competitive selection process. However, previously used evaluation criteria for this component were general and did not allow for an accurate assessment of the applicant's level of internal motivation. Therefore, developing more precise analysis methods would improve objectivity in evaluating motivational aspects during candidate selection.

**Conceptual Modeling and Development of the Analysis Tool**

The conceptual modeling in this study was conducted in four stages.

*In the first stage*, the main components of the internal motivation analysis model, based on Ryan R. M. and Deci E. L., were identified and described as follows:

1. The need for self-determination (autonomy), manifested in the necessity to initiate one's own actions and independently control one's behavior;

2. The need for competence, which is expressed through autonomous goal-setting, striving for effectiveness and efficiency in actions, and expertise;

3. The need for relatedness with others, demonstrated by an awareness of the importance of belonging to a group with shared goals and interests, and collaboration.

*In the second stage*, based on these three groups of needs that define internal motivation, the main characteristics of internal motivation were identified and grouped. The results are presented in Table 1: Structure and Content of Internal Motivation.

**Table 1.** Structure and Content of Internal Motivation

| Structure of Internal Motivation | Characteristics of Internal Motivation |
|---|---|
| Need for Self-Determination | 1) Internal drivers of learning: values, motivation for development, desire to solve specific problems, implement their ideas.<br>2) Awareness of their strengths and weaknesses.<br>3) Thoughtful choice of the program and university (learning opportunities, university reputation, research possibilities).<br>4) Expectations from education (skills, experience, knowledge).<br>5) Expectations from education (practical orientation, academic achievements, research work).<br>6) Alignment of personal goals with the educational program.<br>7) Genuine interest in learning opportunities. |
| Need for Competence | 1) Goals and professional aspirations related to the professional field, practical application of knowledge.<br>2) Ability to present one's own position and personal achievements.<br>3) Understanding of one's own accomplishments and the learning opportunities for their development. |
| Need for Relatedness with Others | 1) Expectations from education (interaction with instructors and classmates).<br>2) Opportunity to share new information and new opportunities with colleagues. |

*In the third stage,* the structure and content of internal motivation for learning were correlated with possible formulations in the motivational essay. The results obtained are reflected in Table 2: Structure, Content, and Formulations of Internal Motivation. It is worth noting that Table 2 visually demonstrates the connection between the formulations and the structure of motivation. At the same time, we emphasize that generic phrases without examples, personal stories, arguments, or template responses—such as "studying is good" or "self-development always helps"—may indicate a lower level of internal motivation or its complete absence.

**Table 2.** Structure, Content, and Formulations of Internal Motivation

| Structure of Internal Motivation | Characteristics of Internal Motivation | Possible formulations indicating internal motivation |
|---|---|---|
| Need for Self-Determination | 1) Internal drivers of learning: values, motivation for development, desire to solve specific problems, implement their ideas. 2) Awareness of their strengths and weaknesses. 3) Thoughtful choice of the program and university (learning opportunities, university reputation, research possibilities). 4) Expectations from education (skills, experience, knowledge). 5) Expectations from education (practical orientation, academic achievements, research work). 6) Alignment of personal goals with the educational program. 7) Genuine interest in learning opportunities. | – I have always been passionate about this field… – The opportunity to develop in… inspires me. – I strive for continuous self-improvement… – My desire is to understand more deeply… – I implemented a project/initiative related to… because I am interested in it. – For me, learning is an opportunity to realize my ideas/plans. – Personal stories: mentions of specific events, experiences, or people that influenced my choice. – It is important for me… – I understand the importance of this education for my development. – I realize that learning will help me become better both as a specialist and as a person. – This course is an important step in my personal growth. – I am aware of my strengths and want to develop them further through education. |
| Need for Competence | 1) Goals and professional aspirations related to the professional field, practical application of knowledge. 2) Ability to present one's own position and personal achievements. 3) Understanding of one's own accomplishments and the learning opportunities for their development. | – After completing, I plan to work in… / to implement… – My goal is to become an expert in the field of… – I intend to apply the knowledge gained for… – I chose this particular course because… – I independently selected…; deciding to take this course was a conscious choice. – I understand that this education will require time and effort from me. |

| Need for Relatedness with Others | 1) Expectations from education (interaction with instructors and classmates). 2) Opportunity to share new information and new opportunities with colleagues. | – I want to find like-minded people to develop my ideas/project. – I want to receive expertise from program leaders and instructors on my ideas and projects. |
|---|---|---|

The fourth stage of the conceptual modeling completed the development of the internal motivation conceptual model by assigning scores to each component, based on the 40-point evaluation scale for motivation in the entrance essay. The results of the fourth stage are presented in Table 3: Internal Motivation Scale in the Evaluation of Entrance Motivational Essays.

Since the need for self-determination (autonomy) indicates awareness of personal and professional interests, intentions, capabilities, and limitations, and is represented by the broadest range of possible features and formulations, this component was allocated 20 points. That is, an applicant demonstrating – or not demonstrating – in the entrance motivational essay signs of awareness and self-determination can receive a score ranging from 0 to 20 points. The components of internal motivation – namely, the need for competence and the need for relatedness with others – were each assigned 10 points.

Thus, the mere presence of formulations indicating one or all groups of motivation components in the text of the entrance essay allows for a score ranging from 0 to 40 points in total. In the context of competitive selection for admission to the master's program in "Business Pedagogy," where each point awarded provides every applicant with an opportunity to pass the selection process and be admitted to the program, every motivational point plays a significant role in evaluation. Moreover, well-argued and substantiated scoring helps ensure fairness and transparency in the assessment process. At the same time, a qualitative analysis of applicants' internal motivation is important for program managers and instructors, as it allows for forecasting each master's student's chances of successfully passing the process and completing their studies at the stage of evaluating their motivational essay.

**Table 3.** Internal Motivation Scale in the Evaluation
of Entrance Motivational Essays

| Structure of Internal Motivation | Characteristics of Internal Motivation | Possible formulations indicating internal motivation | The scores |
|---|---|---|---|
| Need for Self-Determination | 8) Internal drivers of learning: values, motivation for development, desire to solve specific problems, implement their ideas.<br>9) Awareness of their strengths and weaknesses.<br>10) Thoughtful choice of the program and university (learning opportunities, university reputation, research possibilities).<br>11) Expectations from education (skills, experience, knowledge).<br>12) Expectations from education (practical orientation, academic achievements, research work).<br>13) Alignment of personal goals with the educational program.<br>14) Genuine interest in learning opportunities. | – I have always been passionate about this field…<br>– The opportunity to develop in… inspires me.<br>– I strive for continuous self-improvement…<br>– My desire is to understand more deeply…<br>– I implemented a project/ initiative related to… because I am interested in it.<br>– For me, learning is an opportunity to realize my ideas/plans.<br>– Personal stories: mentions of specific events, experiences, or people that influenced my choice.<br>– It is important for me…<br>– I understand the importance of this education for my development.<br>– I realize that learning will help me become better both as a specialist and as a person.<br>– This course is an important step in my personal growth.<br>– I am aware of my strengths and want to develop them further through education. | 20 |
| Need for Competence | 4) Goals and professional aspirations related to the professional field, practical application of knowledge.<br>5) Ability to present one's own position and personal achievements.<br>6) Understanding of one's own accomplishments and the learning opportunities for their development. | – After completing, I plan to work in… / to implement…<br>– My goal is to become an expert in the field of…<br>– I intend to apply the knowledge gained for…<br>– I chose this particular course because…<br>– I independently selected…; deciding to take this course was a conscious choice.<br>– I understand that this education will require time and effort from me. | 10 |

| Need for Relatedness with Others | 3) Expectations from education (interaction with instructors and classmates). 4) Opportunity to share new information and new opportunities with colleagues. | – I want to find like-minded people to develop my ideas/project. – I want to receive expertise from program leaders and instructors on my ideas and projects. | 10 |
|---|---|---|---|

Thus, the analysis of sources showed that the problem of incomplete education has an objective nature, affecting various universities and training programs in different countries worldwide, with dropout rates reaching up to 30%. Despite the diversity of personal and organizational issues hindering completion, the source analysis led to the conclusion that internal motivation is one of the predictors of successful learning and completion of formal multi-year education, including master's programs. This allowed us to propose and substantiate a hypothesis forming the basis of the developed conceptual model: identifying internal motivation to learn at the selection stage can help reduce student attrition during the training process.

The conceptual model for content analysis of internal motivation among applicants to the master's program "Business Pedagogy" at MGPU was developed through a sequential implementation of four stages. At the first stage (based on Ryan R. M. and Deci E. L.), the methodological foundation of the conceptual model was established, consisting of three main components: need for self-determination (autonomy), need for competence, and need for relatedness with others. In the second stage, signs of internal motivation were identified and formulated for each component, enabling us to speak about a conceptual model of applicants' internal motivation. The third and fourth stages served as practical instrumental steps. In the third stage, formulations corresponding to the internal motivation model were selected. The instrumental stages concluded with the fourth stage—development of an assessment scale for internal motivation and scoring for each component of the model.

Thus, the content analysis methodology allowed the author to develop a model of internal motivation as a practical tool for analyzing texts of applicants' motivational essays for admission to MGPU's master's program "Business Pedagogy."

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