

**ICPE 2017**  
**International Conference on Psychology and Education**

**THE ADEQUACY OF PERSONAL SUCCESS PREDICTION IN  
PSYCHOLOGICAL ACHIEVEMENT TESTING**

U.E. Makarevskaya (a) \*, I.G. Makarevskaya (b), Z.I. Ryabikina (c).

\*Corresponding author

(a) Sochi State University, Vidovaya St, fl.69, Sochi, Russia, 354024, yuliya-sochi@mail.ru

(b) Sochi State University, Vidovaya St, fl.69, Sochi, Russia, 354024

(c) Kuban State University, 350040 Stavropolskay, 149, Krasnodar, Russia z.ryabikina@yandex.ru

***Abstract***

At the present time, a number of scientists are considering a psychological study "from the position of the subject", as an experimentally organized activity of the subject to perform a specific behavioral task. In this case, a person is included in the study as an integral object, and, consequently, the organization of research requires the consideration of the basic psychological regularities that determine the behavior of the individual in conditions appropriate to the situation of measurement.

The article gives an overview of the research that reflects the features of predicting the success of subjects in various situations of psychological testing of professional and educational achievements.

The article analyzes the adequacy of the personal forecast to the probable success in the "situation of expertise" and the "client situation". It is shown that in the situation of expert evaluation of achievements, the majority of subjects inadequately predict their chances of success, namely: they underestimate them. And one of the essential factors of the adequacy of a personal forecast of success can be assumed high self-esteem of their own level of knowledge.

© 2017 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Success forecast, testing situation, expert assessments, test of achievements.

## **1. Introduction**

The psychological dimension is, first of all, the process of interaction between the measurer and the measured, with the entire context of the measurement process. In each new context of measurement, a person manifests himself accordingly. The results of any psychological dimension are mediated by the



interaction between the measured property, the method, the measurement procedure, and the object of measurement. In psychology, the object of measurement is dynamic, variable, and most importantly, has a set of characteristics that can significantly affect the results of the study. It is because of the specific nature of the object of the psychological dimension that the process of research in psychology still causes many methodological disputes.

The article compares two measurement situations - the "situation of expertise" and the "client situation", in order to analyze whether there are specific features of a personal forecast of the success of the testing situation, depending on the nature of the situation itself.

Highlighting these situations, we proceed from the fact that in practice "all cases of seeking help from a psychologist can be attributed to two main types:

- the situation of the client - when the person himself appeals to the psychologist for help, for example, for advice (Trust Phone, Centers for psychological counseling, private appeals, etc.);

- the situation of expertise - when the administration addresses the psychologist (for example, the administration of the hospital, schools, courts, enterprises) for help in diagnosing, for example, the level of a person's mental development, the reasons for the deviant behavior of a teenager, the condition of the offender at the time of the crime, professional suitability, etc. " (Belova, 1996).

Therefore, for a psychologist, information about the situational features of the behavioral and cognitive response of a person to different testing situations is professionally important.

Prediction is the basis of almost all the processes of self-regulation, which "accompanies" both external activity and internal psychic activity. The forecast of the outcome of the situation of the psychological dimension implies the presence of: the expected result, based on an assessment of the situation of testing and evaluation of oneself, based on the knowledge of their characteristics (in the case of testing achievements - assessing their awareness and competence level). Predicting the outcome of the situation of testing achievements, the subject evaluates his level of competence, the level of claims, while the expectation of the results of activities is associated with positive and negative emotions and, accordingly, has an incentive value.

Evaluation of the result before testing the achievements is an assessment of the results of their preparedness for the test, the stability of subjective criteria in assessing the success of achieving the desired result. It is based on both the level of competence of the subject and his personal self-esteem and reflection.

Evaluation of the result at the end of the test, but before the results are announced, includes not only assessing your own achievements, competence in a certain area, but also evaluating your performance in a specific situation and the parameters of the situation itself.

In the process of psychological measurement, the subject's subjective notions of himself and the situation of measurement, his potential objectivity and prognosticity, allow the individual to construct a subjective model of the probabilistic structure of the forthcoming testing situation, to carry out a subjective forecast on the basis of this model and to base his activity in accordance with this forecast, which can substantially mediate the effectiveness of the measurement.

Accordingly, the study and analysis of the prognosis of the success of the activity, taking into account the characteristics of the situation of the psychological dimension, is of scientific and practical interest.

## 2. Problem Statement

How often in life does an adult get into the situation of external evaluation, testing their achievements? Given that he himself has a more or less harmonious system of ideas about himself and criteria for assessing his own success.

All the studies devoted to success agree that when evaluating achievements (which are an indicator of success) there are external and internal criteria, that is, objective and subjective parameters of success. Is it possible to evaluate a person's achievements on a single criterial basis? This refers to the comparison of external (subjective) and internal (objective) criteria.

Stable success (achievement) is not accidental, it is always a product of regular actions and thoughts of a person. Specificity of human thinking is such that even before starting activity, it has the ability to predict the result. The forecast of the result is a message to cognitive modeling and a powerful motivational factor of human behavior and activity (Campion, Ployhart, MacKenzie, 2014).

Can the situation itself of the evaluation of achievements be a significant external factor in the person's adequate prognosis of his own success? The origins of understanding the social situation indicate that social interactions play a crucial role in shaping thinking. Theories of situations combine the internal and external determinants of human behavior. As a result, the situationalists' synthetic position in the last century explained behavior as "the result of continuous interaction between the individual and the situations in which he is included; on the personal side, cognitive and motivational factors are significant, on the part of the situation, the psychological significance that the situation has for the individual" (Magnusson & Endler, 1977).

That is, in a situation can be considered as a set of elements of the environment or as a fragment of the environment at a certain stage of the life of the individual, as "a system of conditions external to the subject, inducing and mediating its social activity" (Mokshantsev & Mokshantseva, 2001). In this case, the external position in relation to the subject means:

- ü spatially: extraneous to it;
- ü in a temporary relationship: the precedence of its action;
- ü in a functional sense: independence from him of the relevant conditions at the time of action.

The totality of such characteristics of a situation as extraneousness, independence and precedence to actions fully correspond to those circumstances of diagnostics of human achievements, which can be called an expert evaluation.

Being subjected to an external expert evaluation, presenting their knowledge, experience or other requested characteristics, a person is deprived of the opportunity to doubt the results of diagnostics, since the expert by definition is an expert in one area or another who has confirmed his qualification. And in this regard, the expert evaluation claims the reliability of the results of the diagnosis of achievements, giving an opinion on the success / failure of the subject (sub-expert).

Being in other conditions of diagnostics of achievements - "client's situation" - a person acts as a "customer" of testing, motivated more for self-knowledge than for external evaluation.

Thus, we have two different testing situations in psychological content, in which we are interested in the adequacy of a person's personal forecast of his own success. The problem of studying this topic in the proposed foreshortening is to determine the range of situational determinants that affect the adequacy of a personal forecast of success when testing achievements in the "situation of expertise" and the "client situation."

The stated problem is related to the fact that it is important for the research psychologist to know the situational fluctuations (adequacy) in predicting one's own success in different situations of testing achievements, since such knowledge will help to increase the reliability of the obtained research data.

In addition, we assume that the adequacy of the prediction for the test-takers of the outcome of the testing situation, both in the "expert situation" and in the "client situation", can predetermine the management of their activities and provide psychological security, since it removes uncertainty about future events, which is one of the components of psychological testing safety.

### **3. Research Questions**

The following research objectives were set:

- analyze the adequacy of a personalized success forecast in various testing situations;
- to study the features of probabilistic forecasting of the success of the activity of the subjects taking into account the specificity of the emotional response to tests of achievements (situational anxiety) (Irvine & Kyllonen, 2002; Kolen & Brennan, 2004; McDaniel & Nguyen, 2001; Van der Linden & Glas, 2010);
- to determine the specific components of the personal forecast when testing achievements in the "client situation" and "examination situation".

### **4. Purpose of the Study**

The aim of the research is to reveal the features of a personal forecast of success in various situations of psychological testing of achievements.

### **5. Research Methods**

The whole study was based on a multidimensional comparison of the personal forecast of success when testing achievements in the "situation of expertise" and "client situation." As an area to be diagnosed, an assessment was made of the level of educational and professional achievements (students and specialists of the energy company took part in the study, and the selection of subjects into groups was carried out randomly). A total of 300 people took part in the study.

In general, the scheme of the experimental study was as follows:

R E K

R K E, where R - special group selection procedure; E - measurement of achievements in the "situation of expertise"; K - measurement of achievements in the "client situation".

The prognosis is a regulator of the current behavior of a person, providing pre-adjustment, as a rule, before the beginning of external activity, therefore, the subjects who participated in our study, before testing the achievements, both in the "examination situation" and in the "client situation" in which they assessed their level of competence in the area to be diagnosed, made a guess as to the possible outcome of the study (a forecast was made about a possible successful outcome) and expressed their opinion as to how objective the testing procedure is.

Long wait, when a person is in a situation of uncertainty and activity is still to be done, and immediate active actions are still excluded, can lead to an alarm that can potentially be fixed in similar situations.

The repeated anxiety associated with the testing situation may also mediate the results obtained during the study, especially significant such mediation may be in the "examination situation", when the results obtained in the study make significant decisions for the subject, so in our study we also recorded the level of situational anxiety in the subjects.

A high level of anxiety can, in our opinion, make ineffective or impossible the purposefulness of activities in the situation of expert assessment of knowledge, academic and professional competence (skills testing, certification, examination, etc.) due to the impossibility of adequate correction of the level of claims, regarding the possible success in the testing situation. As studies show, in highly anxious subjects there may be a mismatch in the performance of activities associated with the poly-motivated nature of this activity, with the simultaneous relevance of the motive for achieving success and the motive for avoiding failure.

In this regard, in the study, we also analyzed whether there are features of predicting the success of the activity in the situation of testing achievements in subjects with different levels of anxiety.

Thus, in the course of the study, the following methods were used: conversation, questioning, testing (test of training and test of professional achievements, self-assessment scale of the level of situational anxiety of C.D. Spielberg). To process the results of the study, we used: U-Manna-Whitney, Spearman's rank correlation coefficient.

## **6. Findings**

The adequacy and focus of the inadequacy of the personal forecast of success in the situation of testing achievements were studied by us through revealing the shift between the actual result obtained by the test subject during the testing and the predicted assessments determined by the test subjects before the testing begins.

As a result, several groups of subjects were singled out: subjects whose personal prognosis for success in the testing situation corresponded to the actual results obtained; test subjects predicting a result corresponding to lower values than those actually obtained; and subjects, whose prognosis of success corresponded to the results greater than they were received in reality.

**Table 01.** Distribution of subjects depending on the adequacy of a personal forecast of success in the "examination situation" and in the "client situation".

	"The situation of expertise"	"The situation of the client"
Adequate forecast	109 people. (36.3%)	135 people. (45%)
Overstating the forecasted result in relation to the real	40 people.(13.3%)	64 people. (21.3%)
Underestimation of the projected result in relation to the real	151 people. (50.3%)	101 people (33.7%)

Thus, there is a certain specificity of forecasting success in the "situation of expertise" and "client situation". In the "client situation", a larger number of subjects gives an adequate prediction about a possible successful outcome of the testing situation, in the "expert situation" most of the subjects demonstrate a tendency to underestimate the predicted result compared to the real one.

Let us analyze whether there are differences in the adequacy of the forecast of success, comparing the "situation of expertise" and "the client's situation." Statistical processing using the U-Mann-Whitney criterion showed that there are significant differences in the adequacy of a personalized prognosis for success in the "examination situation" and the "client situation". (at  $p=0,001$ ).

So, in the "situation of expertise", the subjects are more likely than in the client's situation to inadequately predict their own success (underestimate the expected results).

Analyzing the assumptions of the subjects regarding the potential objectivity of the results obtained by the researcher during the diagnosis, we obtained the following picture: the overwhelming majority of the subjects, both in the "examination situation" and in the "client situation", assume that the data to be obtained during the diagnosis will be real assess the level of development of their academic or professional competence. At the same time, the number of subjects who assumed that the data obtained in the study could be biased was equal to 43 (14.3%) in the "examination situation", and 79 (26.3%) in the "client situation".

The statistical analysis carried out with the help of the Mann-Whitney test allows us to assert that in diagnosing educational and professional achievements in the "client situation", subjects are significantly more likely to believe that the result can be due not only to the level of development of their academic or professional competence, but also to the action random, extraneous factors ( $p\leq 0,001$ ). As the factors that could influence the results, subjects called: ergonomic factors (noise level, room lighting, etc.), own physical and psycho-emotional state ("headache," "anxious", "I want to sleep, etc.).

In our study, the subjects' task was how to predict the possible result of the test, and to give a self-assessment of the level of their competence, to assess the level of their educational and professional achievements. Let us analyze whether there is a correlation between the result that the subject predicts as a possible outcome of the testing situation and the self-assessment of the level of development of the subject field under study.

In the situation of expertise there is a significant connection between the forecast of the result of testing achievements and the self-assessment of the level of development of educational and professional achievements ( $r_{xy} = 0.642$  for  $p \leq 0.001$ ). An interesting and important result of our study, we see the fact that in the "client situation" such a statistically significant relationship between self-assessment of

educational and professional achievements and the predicted result of testing was not revealed. ( $r_{xy} = 0.143$  at  $p \geq 0.01$ ).

That is, a high opinion of one's own level of knowledge is associated with a high forecast of one's own success in situations of peer review of achievements. In this case, considering that most of the subjects in the "situation of expertise" underestimated themselves, we can assume that this is one of the key factors in the adequacy of the forecast of their own success. Those subjects who rated themselves highly, made a forecast for high success in the tests of achievements, got really high marks for testing - made up a minority of the sample and had an adequate forecast of success in the "situation of expertise"

## 7. Conclusion

Summing up this research, we can draw the following conclusions:

1. The situation of the client and the situation of expertise in the testing of achievements differ significantly in the adequacy of the personal forecast of success.

2. In the situation of expertise in assessing achievements, a significantly greater number of subjects underestimate the level of success in the forecast. That is, they believe that they will be less successful than it turns out in reality.

3. "Client situation" and "examination situation" do not differ statistically in terms of emotional tension for the subjects (based on an analysis of the level of situational anxiety). That is, this emotional factor of influence on the forecast of success is leveled.

4. It is determined reliably that high self-esteem for the subjects of the level of their knowledge is directly related to predicting their own success when testing achievements in the "examination situation". This means that with a high opinion of oneself (in terms of mind, knowledge, experience), a person is inclined, with an expert evaluation of achievements, to predict his result as successful. And when testing in the "client situation," the personal forecast of success is not related to self-assessment of the level of their knowledge and can be different.

The results obtained, in our opinion, are of great importance for practice when:

- justification and agreement of the data of the internal prognosis of success by the test subjects and his and external evaluation in expert studies of achievements,

- Increased confidence in the results of various situations of testing achievements;

- development by the individual of effective means of an adequate forecast of own success.

The results obtained, in our opinion, are of great importance for practice when: - justification and agreement of the data of the internal prognosis of success by the test subjects and his and external evaluation in expert studies of achievements, - Increased confidence in the results of various situations of testing achievements; - development by the individual of effective means of an adequate forecast of own success.

## References

Belova, O.V. (1996). General psychodiagnosis. Guidelines.-Novosibirsk: Scientific and Educational Center of Psychology of NSU.

- Campion, M.C., Ployhart, R.E and MacKenzie W.I. (2014). The state of researches according to situational judgments: the analysis of the content and direction of future researches. *Human Performance*, 27:283-310
- Irvine, S.H and Kyllonen P.C., Eds. (2002). Generation and development of tests. Mahwah, New Jersey: Lawrence Erlbaum Associates
- Kolen M.U. and Brennan R.L. (2004). Testing, scaling and linking: methods and practice. New York, Springer.
- McDaniel, M.A., Nguyen, N.T. (2001). Situational judgment tests: A review of practice and constructs assessed. *International Journal of Selection and Assessment*, 9(1-2), 103-113.
- Mokshantsev, R.I., Mokshantseva, A.V. (2001). Social psychology. textbook for high schools: Novosibirsk.
- Magnusson, D., and Endler, N. S. (1977). *Personality at the crossroads: Current issues in interactional psychology*. New York.
- Rmsei. (2005). Expansion of the practical method for developing alternative test forms with using independent sets of elements. *Methods of organizational researches*, 8 (2): 149-164.
- Van der Linden, W.J. Glas C.A.W. (EDs) (2010). Computerized adaptive testing: theory and practice. New York.