

## SOCIAL PSYCHOLOGY

# Competitiveness of personality as a psychological phenomenon: The content of the construct and its typology

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Human activity (professional and production-related) occurs within the context of explicit or implicit competition and proves to be more or less productive and creative. Operationalization and measurement of the competitiveness of personality without due regard for personal and situational interactions reduces the content of the notion. Competitiveness requires a high degree of personal energy, flexibility, intelligence, and creativity in regulating activity. However, enlarging the domain of psychological studies has necessitated the study of personality in the context of the natural social situations in which it functions. This structural and functional analysis allows expansion of the description of the phenomenology of the competitiveness of personality as well as classification of the strategies of competitive behavior. In this study competitive-behavior strategies (1,064 critical incidents in professional activities) were analyzed using the Critical Incident Technique and thematic content analysis. To classify the data set, I used two-step cluster analysis as an exploratory method and analyzed the cross-tables of several categorical variables using the log-linear method of model selection. I applied the Solution Tree method for categorical variables to build a dependent-variable hierarchical model with the relevant predictor values. Through analysis of the results of the cluster analysis, the hierarchical model, and the functional and situational analysis of the context, it is possible to single out and validate three types of competitiveness strategies: the dependent, irrational, destructive, short-term strategy (quasi-competitiveness); the dependent, rational, constructive, short-term strategy; and the free, rational, constructive, long-term strategy. Study of the nature of competition and a subject's competitive-behavior strategies is required to analyze, predict, and correct destructive strategies for enhancing performance.

**Keywords:** competition, competitiveness, subject, activity, competitive behavior, competitive activity, competitive behavior strategies

## Introduction

The ability of any state or institution to compete favorably on the world market and to ensure improvement in living standards is particularly relevant in the context of global competition. Factor-based models for evaluating competitiveness (from the International Institute for Management Development and the World Economic Forum) incorporate expert evaluations by top managers and professionals from most countries to describe those competencies that improve national welfare. Recent research proves that competitiveness must be studied not only on the macro- and meso-levels but also on the micro-level (Fatkhutdinov, 2009; Garelli, 2014; Schwab, 2013).

Thus, for instance, the concept of lean manufacturing — in which management pursues the elimination of all types of value-reducing wastes — can be deemed a particular innovation. Lean manufacturing suggests the engagement of each employee in the business-optimization process with maximum focus on the consumer. Jeffrey Liker, who (together with James Womack and Daniel Jones) has researched the Toyota manufacturing experience with the process of waste analysis, has described this type of management as releasing the unrealized creative potential of the workforce (Liker & Meier, 2007).

Competitiveness is definitely a part of competition, and therefore the study of the phenomenon of competitiveness is inseparable from analyzing prevailing trends in understanding the nature of competition; otherwise the result is a reduction of the content of the concept. The notion of competition as a metacategory has been evolving under the influence of psychology and also in a wider cross-disciplinary context; this evolution has enriched its content and has led to stipulation of the sequence of problem-theoretical analysis (Kovalenko, 2013; Shmelyov, 2014a, 2014b).

### ***Competition and personal competitiveness in a cross-disciplinary context: a brief historical foray***

Based in natural philosophy perceptions that struggle is the source of everything existing in nature and in society — “War is the father and king of all things, it shows some as gods, some as men, it makes some freemen and others slaves. War is universal” (Heraclitus, trans. 1969, p. 276) — the contemporary cross-disciplinary theory of biodeterminism understands competition as the strife that exists among all (Rubin, 2010).

Competition is inherent in various types of activity in which conflicts of interest occur. Therefore, competitive relations initially required organization, stimulation, and regulation (Aristotle, trans. 1984; Plato, trans. 2002). From the ancient Greeks to the neoclassicists, financial interests were regarded in economics as a basis for competition among workers (Gordeev, 2007).

The understanding of competition as a struggle for existence, the deriving of profit by using the most favorable conditions for the manufacture and sale of products, or an aspiration for matching, as far as possible, the criteria of access to rare benefits is the basis for improving skills and expertise to create and develop innovations in light of the economic model (Hayek, 1979/1999; Marx, 1885/1978; Schumpeter, 1942/1995). The role of “human nature” came to the fore after competition was introduced as a scientific concept.

In social contract theory T. Hobbes (1651/1991), in describing human nature, maintained that competition was initially inspired by pure egoism — a desire for self-preservation and pleasure. The equality of human abilities gave rise to the equality of hope in attaining one's ends. Therefore, the war of all against all (*bellum omnium contra omnes*) was natural for humans. Hobbes found three principal causes of war — competition, diffidence, and glory.

Reasoning on the basis of the causes of social inequality, J.-J. Rousseau (1755/2004) stressed that competition is based on the universal striving for glory, honors, and distinctions, which induce one to enhance and compare one's abilities and powers.

Claude Helvetius asserted that two sensations — love of pleasure and hatred of pain — produce a third sensation, self-love, whose development gives birth to passions and striving for happiness and personal interests, which are the main motives for social development (“self-love is the only basis on which we can place the foundations of a useful morality”). This idea greatly influenced the thinkers of the 19th century, who emphasized the social aspects of competition (Faminskii, 1987).

The phenomenon of competition has been widely covered by various schools of social theory — utilitarianism (J. Bentham, J. S. Mill, and others), social Darwinism (W. G. Sumner), and H. Spencer's sociology. Proponents of utilitarianism offer a social-activity model in which individuals intentionally pursue their private interests, and society is nothing more than a multitude of individuals brought together to accomplish their own goals. A human being seeks personal benefits, whereas the common good is composed of the aspirations of all people to attain their private interests. The common good is a total of private goods. According to Mill:

[Competition] may not be the best conceivable stimulus, but it is at present a necessary one, and no one can foresee the time when it will not be indispensable to progress. ...To be protected against competition is to be protected in idleness, in mental dullness; to be saved the necessity of being as active and as intelligent as other people. (Mill, 1848/1980, p. 395)

As noted by B. Russell (1945/2010), philosophic radicalism was an intermediate school that gave rise to two other important systems, Darwinism and socialism. The social theories of biological determinism applied the natural-selection principles of C. Darwin to society. We come across a description of social processes from the viewpoint of the struggle for existence and the fitness for survival in the sociology of H. Spencer (he coined the phrase “survival of the fittest”). According to Spencer, social conflict is evolutionary positive because it should eventually lead to a perfect society.

The present-day understanding of competition as an action underpinned by the rivalrous and competitive nature of individual agents (citizens, organizations, social groups, and communities), who are trying both to possess certain resources and to improve their standing against that of others, permits the assertion that competition is an objective law for the development of society; the primary vehicle of competition is the process of pursuing individual needs, and this process guarantees positive changes in the socioeconomic relations of a society (Rokhmistrov, 2000).

Competitiveness is definitely a process of managing advantages. Analysis of the nature of competition in the social sciences confirms the point that competitiveness of personality indicates a potential for rivalry, for struggling for huge benefits and advantages in a certain field; such advantages ensure an individual's survival in the context of social struggle. In the study of competitiveness and the social aspects of competition, the content of the concept of competitiveness of personality has been defined as implementation of a behavioral pattern derived from social attitudes that are based in institutional matrices, which describe integral systems of economic, political, and ideological institutions. Within one type of society competitiveness of personality has been linked primarily to, but is not dependent on, notions of rivalry, prestige, reputation, image; this is the institutional X-matrix prevailing in Russia. Within another type of society competitiveness of personality cannot exist without notions of competition, prestige, reputation, and status; this is the institutional Y-matrix, which prompts an individual to acquire a competitive advantage (Kirdina 2014; Tuktarov, 2007).

The prevailing trends in this cross-disciplinary context have drastically influenced the interpretation of the essence of competition and the description of the phenomenon of competitiveness of personality in psychology.

### ***Interpretation of competition and competitiveness in psychology***

#### *Rivalry as a feature of personality*

In psychology competition is viewed as a synonym for rivalry in the interrelations of people; it is a state of covert struggles for power, love, prestige, recognition, financial prosperity, implementation of inner potential. As mentioned above, rivalry indeed mobilizes a person's potential and stimulates development. In psychoanalysis rivalry is viewed as influencing character formation and thus as a substantial part of a child's psychosexual development.

Moreover, rivalry may result in aggression or may become pathological and lead to a person's becoming neurotic. In neurotic rivalry, the success, recognition, prestige to be obtained are more essential for the person than the content of the activity. In that case the creative aspect is dominated by the deleterious one (Freud, 1923/1998; Horney, 1937/1993).

Analyzing the conditions of human existence and their alterations in the economic and political spheres starting from the end of the Middle Ages up to the 20th century, Fromm (1946/1994) noted that in the Middle Ages people felt themselves to be an intrinsic part of social and religious communities; they conceived of themselves in reference to these communities before they began to consider themselves as individuals and before they had fully emerged from these groups. In the modern era, when people began to be faced with the task of experiencing themselves as independent entities, their own identity became a problem. In the 18th and 19th centuries the concept of self was narrowed down increasingly; the self was felt to be constituted by the property one had. The formula for this concept of self was "I am what I have, what I possess." Under the influence of the growth of a market economy, the concept of self shifted from meaning "I am what I possess" to "I am as you desire me." People living in a market economy feel themselves to be a commodity. They are divorced from themselves. Their self-interest turns out to be the interest of

the subject who employs them as a commodity that should obtain an optimal price on the personality market. Success depends largely on how well people sell themselves in the market. The economic function of the market in modern society is not solely to set a model for orientation but to be the basis and the main condition for human development within a society. Rivalry as a feature of personality is distinguished by a high need for achievement, by ambitions, by competitive behavior in all spheres of life (learning, work, rest, love), and by impatience and a tendency toward aggression when frustrated. Rivalry is a risk factor for psychoemotional distress but has been cultivated by modern civilization (Rean, 2008).

*The dichotomous approach in the study of competition:  
competition-cooperation*

Comparing competition with cooperation in social and educational psychology has led to the understanding that competition is destructive, unlike cooperation and teamwork (for instance, cooperative leadership), which constitute a healthy form of interaction leading to positive interpersonal relationships (Andreeva, 2010; Bendas, 2009; Fülöp, 2009).

Cooperation is considered to result in readiness to be helpful, supportive, and respectful; in openness in communication; in trusting and friendly attitudes; in sensitivity to common interests; and in orientation toward enhancing mutual power rather than power differences. In addition, cooperative goal structures facilitate learning and bring about superior performance.

In contrast, competition induces coercion, threats, deception; poor communication; suspicious and hostile attitudes; anxiety; fear of failure; the aspiration to prevent others from winning; self-orientation. Rivalry gives rise to aggression. Conflict as actualized contradiction — a clash of opposed interests, targets, opinions, views of the subjects of interaction or opponents — is the most evident form of competition, and clashes between opponents may lead even to the aspiration to gain a victory over a rival (Fülöp, 2009; Myers, 1983/2000).

However, results of cross-cultural comparisons — the analysis of win/lose situations in competition — prove that competition is not in a dichotomous relationship with cooperation. Cooperation and competition as idealized, separate processes seldom occur in their “pure” state and are not mutually exclusive in the business world. Study of the psychological attitudes and business activity of entrepreneurs in Russia proves that for an entrepreneur competition is not merely based on a concern for economic resources (for deriving profit) but is also a way to gain independence, recognition in society, a good reputation among entrepreneurs, and the ability to implement new projects. Gender-based differences have also been discovered in attitudes toward resource competitiveness. Male entrepreneurs put more emphasis on the ability to risk, whereas female entrepreneurs regard as more valuable the ability to approach people. Through the use of optimal coping strategies in competition-related win/lose situations, fairness, and rule-keeping, the experience of competition can also be a constructive force in life. Combined with competition, cooperation leads to a higher level of performance than cooperation alone and thereby ensures increased competitiveness in economic activity (Bazarov & Shevchenko, 2010; Fülöp, 2009; Zhuravlev & Poznyakov, 2012).

*A problem in the study of competitiveness of personality in psychology*

In modern research the performance of human activity (production-related or professional) is viewed as a consequence of a high level of competitiveness. Cognitive and motivational features (activity, achievement, intelligence, creativity) are substantial personal determinants of competitiveness. Studies in this area regard competitiveness of personality as a set of individual and psychological personality traits that enable one to self-develop in a changing and irregular living environment, to find optimal, humanistic ways to achieve a target, and to be in demand and successful, both personally and professionally. However, competitiveness of personality, which is subject to sociopsychological or individual typological variables, has been described as isolated unbound variables in the structure of competitiveness of personality (Mitina, 2003; Podosinnikova, 2007; Tokareva, 2007; Zhuravlev & Ushakov, 2009). Behavior acts as a function of the ongoing interaction between a person and a situation; in such interactions psychological notions of the situation appear as substantial determinants. Operationalization and measurement of personal competitiveness outside the personal-situational interaction — outside the competitive environment, outside the social situation in which a person keeps functioning — cause reduction of the content, a “fundamental attribution error” (Burlachuk & Mikhailova, 2002).

I believe that the description of the phenomenon of personal competitiveness can be expanded by functional and situational analysis and by classification of competitive-activity strategies, which is the subject of my study and determines the further course of theoretical analysis, on which the model hypothesis for the study is built.

*Competitive-activity strategies; model hypothesis for a personality-competitiveness typology*

Theoretical analysis indicates that most activity occurs in the context of explicit or implicit competition. A competing subject actively sets targets and elaborates strategic plans rather than merely responding to changes in the environment. Thus, the independent investigative behavior of a subject is a strategy for counteracting “Trojan horse” teaching, which ensures resource competition between participants in the process of education (Poddiakov, 2006). Analysis of the notion of competition in the context of the psychological metacategories of activity and communication enables the description of competitive behavior (human behavior in a situation of competition or rivalry) and competitive activity as a specific type of a subject’s target-oriented activity against an object, which thus satisfies needs. Thus, competition, according to Shmelyov (2014a, 2014b), can be described in the subject-object-subject scheme, wherein each subject seeks to influence a certain object given the presence of other subjects, who are likewise influencing the same object. Psychologically, fair competition is the focus of a subject’s attention on his/her own interaction with the object — that is, on the S–O intrinsic link — rather than on the link to the rival (S–S). Unfair competition is reflected in this scheme as destructive subject interaction along the S–S line, to the detriment of productive, substantive activity along the S–O line. A “shift from target to means” is observed in the case

of conscious regulation because the “rival” (a minus-signed means, to some extent) is the element of external conditions specified by the target; the rival serves as an obstacle rather than as a positive means to reach the target. Perceiving a rival as an obstacle (that is, via categorizing the situation as an S–O type) precludes chances for shifting the situation from competition-conflict to competition-cooperation. Nevertheless, subject interaction along the S–S line can also be productive because other subjects are perceived as a plus-signed means for that subject’s development, provided that the business organizational culture is characterized by the availability of a competitive environment. In that case competition can be extrinsic (performance-oriented) and intrinsic (aimed at self-development), a situation that helps to substantiate the “the beauty and the beast” paradigm. The beast is extrinsic and performance-oriented motivation, which is connected with striving “to be better, wants to be the best.” The beauty is intrinsic and task-oriented/mastery motivation (Bazarov & Shevchenko, 2010; Fülöp, 2009).

Analysis of competitive behavior as an element of the functional and situational method (regulating, differentiating, adopting social roles, evaluating a rival’s actions, having an attitude toward a competitive situation as such) enables descriptions of rational and irrational strategies. A rational strategy has a positive valuation because the interaction between those engaged in a competition is guided by certain rules and is accompanied by the assumption of definite roles (involvement in a professional competition, employment, and so on). An irrational strategy, which is reproduced/manifested in the form of various intrigues/acts of sabotage and perfidy, causes mistrust and has a negative valuation because of the competitive interaction of the subjects.

Based on the content of the subject matter of the competition as an element of analysis, the S–O constructive strategy promotes enhanced performance and quality of the work or stimulates mastery development (the S–S constructive strategy). The destructive S–S strategy fails to promote positive changes because a rival or a rival form acts, in various destructive/discriminatory/cataclysmic ways, through various forms of insinuation.

With a rational constructive strategy, an activity, which no matter how well implemented is always externally stimulated, can be deemed as reaching the mastery level, but it exhibits no creativity, as it exerts not even the slightest influence on the stability of the general competitive environment. Study results in the psychology of creativity prove that as soon as a request has been fulfilled, the process of activity development terminates (the stimulus-productive tier). In that case competition is a factor in the intensified enhancement of professionalism and the quality of the work; however, competitiveness of personality has “rational dependence” in the context of a stable competitive environment because competition is a required driver for development, as described in the economic model and the social sciences. Activity that develops at the initiative of the subject reveals new laws for generalization on the special (heuristic) level or the global (creative) level (Bogoyavlenskaya & Klyueva, 2012). Transformation or creation of a new object as the subject matter of competition ensures a level of innovation that permanently outstrips the defined initial conditions of the competition and appears as the basis for a free strategy that ensures responsiveness to the competitive environment (Table 1).

**Table 1.** Model hypothesis for the study: a personality-competitiveness typology

Elements of the functional and situational analysis	Competitive-activity strategies		
Rivals' behavior	Rational		Irrational
Subject matter of the competition	Constructive		Destructive
Determinacy	Free	Dependent	Dependent
Stability/responsiveness of the competitive environment	Responsiveness of the competitive environment	Stability of the competitive environment	–
Competitiveness type	Rational- constructive, free strategy of competitiveness	Rational-constructive, dependent strategy of competitiveness	Irrational-destructive, dependent strategy, or quasi-competitiveness

## Method

### *Participants*

The study was carried out with the involvement of respondents from Moscow, Tver, and Bryansk: students (27%), professionals (33%), entrepreneurs (hired top- and medium-level managers) (40%). The study was conducted in 2009–2014. Participants were recruited from various organizations. A total of 1,064 individuals were approached to participate in the study. Participation was voluntary. Those individuals who agreed to participate were instructed to ask a colleague with whom they interacted and collaborated often at work to participate with them. A total of 1,064 completed questionnaires were collected. The sample consisted of 524 males (49.2%) and 540 females (50.8%). The average age of the participants was 37.9 years (SD = 6.43).

### *Measures and procedure*

The Critical Incident Technique was applied to collect descriptions of competitive behavior, the environment in which the behavior occurred, and its aftermath. The episodes, called “critical incidents,” were specific actions that illustrated the success or failure of any aspect of the activity being analyzed in the competitive environment. The Critical Incident Technique involved individual semi-structured interviews, a group discussion, and written questionnaires (Flanagan, 1954; Hettlage & Steinlin, 2006; Serenko, 2006).

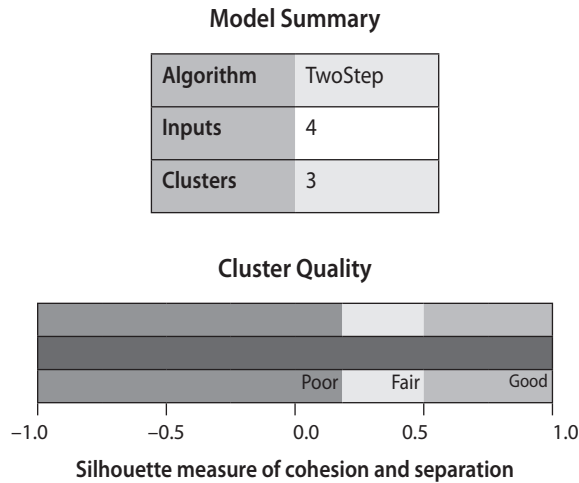
Behavioral patterns in the context of competition have been studied and analyzed using thematic content analysis. Based on a theoretical case study, the key elements needed to perform the functional and situational analysis were included and presented in the list of questions for the respondents and as subcategories in the codebook for the content analytical study: subject matter of the competition, behavior of the rivals (behavioral regulations, differentiation and adoption of social roles, evaluation of rival's actions, subject's attitude to a competitive situation as



such, responsiveness and stability of the competitive environment). Respondents' replies to the questions were taken as a measure of the context of the content analytical study. The codebook was developed according to the qualitative research technique (Bogomolova & Stefanenko, 1992). Validation of the method based on the criteria of "volume completeness" and "sense-bearing units content" was achieved using re-coding and expert evaluation and by supplementing the codebook categories with new subcategories at the phase of pilot-text coding. Stability of the data was corroborated by repeated coding of the same document by the same coder and by various coders working under the unified instructions. The data from different codings show an acceptable level of agreement, with divergence no higher than 5% ( $rs=0.5-0.7, p < .05$ ).

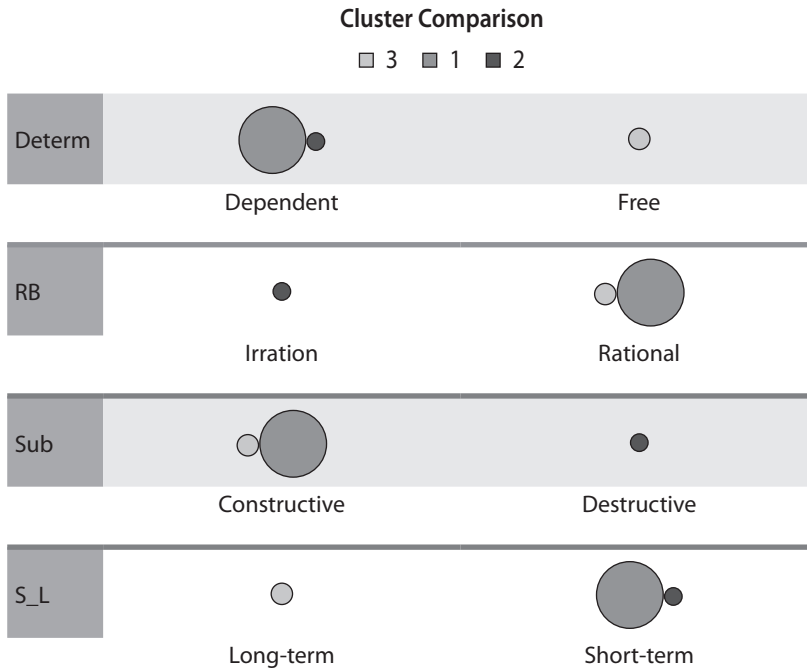
**Results**

To process the outputs we used two-step cluster analysis to explore the natural breakdown of the data set into groups (or clusters), which can hardly be identified as categorical variables without it. The distance measure was calculated using log-likelihood. The best cluster number was automatically determined using IBM SPSS Statistics software (version 20). Figure 1 provides a model summary. The average silhouette measure of cohesion is 1, with good quality of separating four predictors into three clusters.



**Figure 1.** Model summary and cluster quality

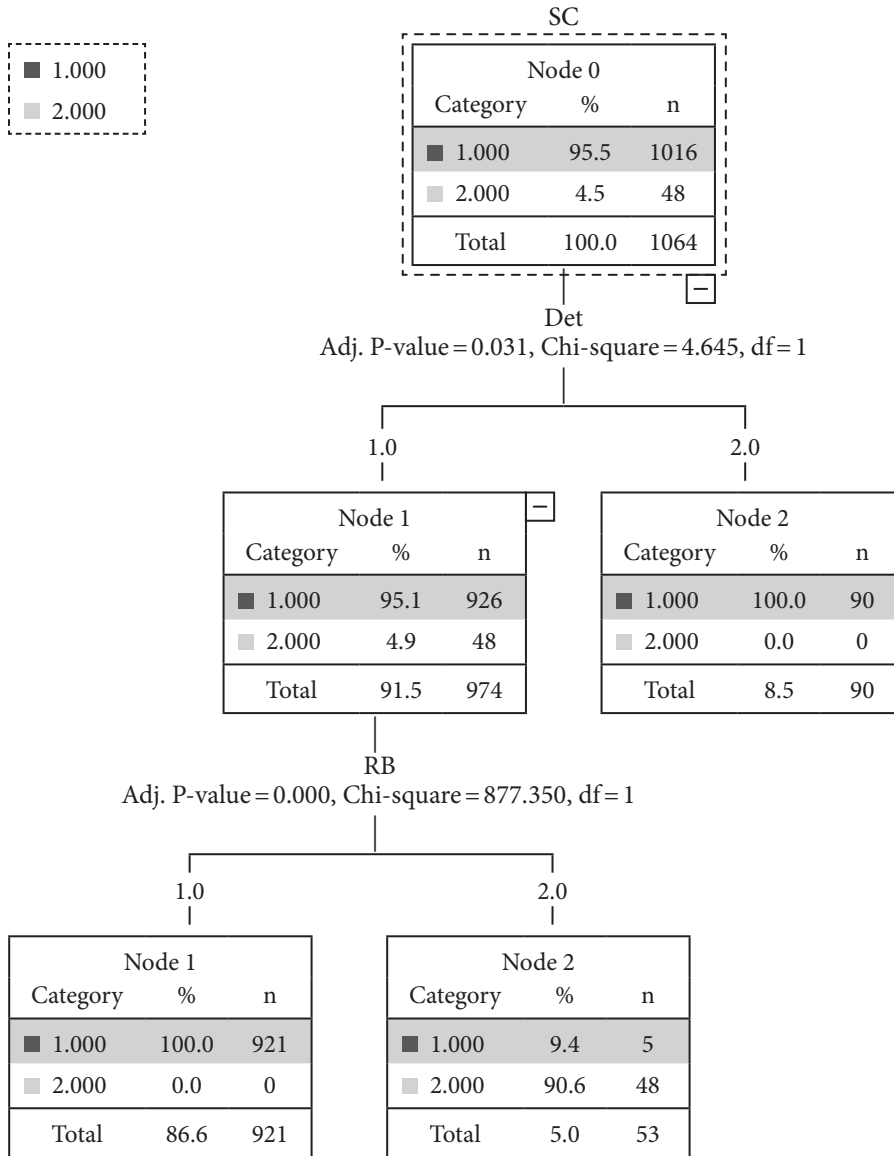
For cluster sizes refer to the circular chart (Figure 2). The smallest cluster size (2nd cluster) is 5%, that of the largest cluster (1st cluster) is 86.6%; the 3rd cluster size is 8.5%. The ratio of largest-to-smallest cluster is 17:38. The cluster model developed brings to light specific features of the separate clusters. The cluster comparison indicates that the factors dependent, rational, constructive, short-term strategy shape the 1st cluster, while the 2nd cluster comprises the factors dependent, irrational, destructive, short-term strategy; the 3rd cluster comprises the factors free, rational, constructive, long-term strategy



**Figure 2.** Cluster comparison (Determ — determinacy; RB — rivals' behavior; Sub — subject matter of competition; S\_L — short-term/long-term (stability/responsiveness of the competitive environment))

The distance measure based on likelihood suggests that the variables in the cluster model are independent and have multinomial distribution. I applied the log-linear method of model selection to analyze cross-tables of several categorical variables (Nasledov, 2013). By applying the method of backward selection from the saturated model, I obtained an insignificant result for the entire model ( $\chi^2 = .003$ ,  $p = 1.000$ ) — that is, the frequencies expected in accordance with the model quite precisely complied with the observed frequencies. This method resulted in formation of a hierarchical model that includes such statistically valid interactions as determinacy \* rivals' behavior ( $\chi^2 = 9.621$ ,  $p = .002$ ), subject matter of the competition \* productivity ( $\chi^2 = 32.626$ ,  $p = .000$ ), subject matter of competition \* rivals' behavior ( $\chi^2 = 22.185$ ,  $p = .000$ ), productivity \* rivals' behavior ( $\chi^2 = 8.259$ ,  $p = .004$ ). Both the statistically significant differences between frequencies and the moderate and strong relationship between variables were discovered during cross-table analysis ( $p < .05$ ). The categorical variables have defined multinomial distributions ( $p < .05$ ).

To study the statistically valid relationships between a dependent variable and predictors in the form of a hierarchical structure and to classify the values of a dependent variable under the relevant values of predictors, I applied the Solution Tree method for categorical variables. For a model summary see Figure 3. I regard the subject matter of a competition — constructive/destructive strategy — as a dependent variable.



**Figure 3.** The Solution Tree for categorical variables: SC — subject matter of competition (1 — constructive, 2 — destructive); Det — determinacy (1 — dependent, 2 — free); RB — rivals' behavior (1 — rational, 2 — irrational). The total percentage of correct predictions is 99.5%; risk assessment is 0.005.

The cluster model, the log-linear method, and the Solution Tree help us describe various types (strategies) of competitive behavior: the free, rational, constructive, long-term strategy; the dependent, rational, , constructive, short-term strategy; the dependent, irrational, , destructive, short-term strategy (quasi-competitiveness

## Discussion

In 86.6% of cases the respondents presented fair-competition descriptions without artful and perfidious modes/techniques of confrontation/opposition. Competition as a critical incident in professional activity had a positive valuation, and competitive interaction between subjects was guided by certain rules, accompanied by the adoption of definite roles (involvement in a professional competition, employment, and so on); in other words, the subject matter was a rational strategy of competitive behavior. By the subject-matter-of-competition criterion the rational strategy is constructive because the focus of the subject's attention is his/her own interaction with the object — that is, it is on the S–O intrinsic link and thus promotes an improved quality of work. Also presented were descriptions of the productive competitive interaction of subjects along the S–S line, as other subjects were perceived as a means for development; in its turn, such development contributes to intensified staff selection and deployment, the encouragement of development, enhanced professionalism, and changes in an establishment. Thus, competition may be extrinsic and performance motivated, and intrinsic, targeting self-growth (Bazarov & Shevchenko, 2010; Fülöp, 2009; Shmelyov, 2014a, 2014b).

According to the cluster-analysis results, in 91.5% of the critical incidents competition was a determining condition for successfully intensifying staff selection and deployment, thereby enhancing professionalism and the quality of work. In this case of a rational and constructive strategy, activity performance was arbitrarily high but always outwardly stimulated and so can be regarded as mastery but not as creativity; in other words, competitiveness of personality showed “rational dependence” in the context of a stable competitive environment. Regarding the time parameter of the subject matter of the competition, respondents described short-term competitiveness (here-and-now profit, problem-solving in a competitive environment) irrespective of future prospects for activity, image, outward success, and self-promotion.

A competing subject can actively set personal targets and elaborate strategic plans rather than merely responding to changes in the environment. Overall, 8.5% of the critical incidents were classified as free, rational, constructive, with a long-term strategy. Based on their observations, the respondents described cases from their professional activity where the origination and successful introduction of new technologies drastically improved the quality of work and were accompanied by a positive economic effect, but the conversion of the object of the activity as the subject matter of the competition was not caused by the competitive situation but was made on the subject's own initiative; in this case, the conversion of the object outstripped the defined, initial conditions (long-term competitiveness — that is, work for future prospects, brand creation, establishment or subject reputation) and contributed to the responsiveness of the competitive environment (Bogoyavlenskaya & Klyueva, 2012).

The problem analysis indicated that in a competitive environment subject interaction along the S–S line can be destructive, to the detriment of productive, substantive activity along S–O line. The respondents provided descriptions of destructive interactions with other subjects (group conflict, aggressive actions of managers or colleagues toward one person on a team, the creation of unfavorable conditions

for an employee such as cases of horizontal and vertical bullying, and favoritism in employment, career enhancement, and so on regardless of professional qualities). A “shift from target to means” was observed in a case of conscious regulation, as the rival served as an obstacle rather than as a positive means for reaching the target. Perceiving a rival as an obstacle precludes chances to shift the situation toward competition-cooperation (Shmelyov, 2014a, 2014b). Thus, the described competition strategies facilitated singling out such features as irrational, destructive, dependent, short-term (quasi-competitiveness).

In view of the cluster-analysis results of breaking the data set into groups, the results of the Solution Tree method for building a hierarchical model, and the functional and situational analysis of outputs in the context of analytical review, I believe that the model hypothesis of study has been confirmed and enables singling out and validating three types of subjects’ competitiveness strategies: type I — dependent, irrational, destructive, short-term (quasi-competitiveness); type II — dependent, rational, constructive, short-term; type III — free, rational, constructive, long-term.

## **Conclusion**

Human activity occurs in the context of competition and proves to be more or less productive and creative. As a consequence, competitiveness requires a high degree of personal energy, flexibility, intelligence, and creativity in activity regulation. However, expanding the domain of psychological studies has necessitated the study of personality in the context of the natural social situations in which it functions. Theoretical analysis of personal competitiveness indicates the need for a subjective, activity-based, and situational approach in describing a subject’s competitiveness in the context of a competitive situation or environment. If this approach is not used, there will be a reduction in the content of the notion.

With the help of structural and functional analysis of a series of signs (the focus on a subject; the repertoire of actions, operations, and behaviors; the situational experience; the subjective classification of a situation) I have expanded the description of the phenomenon of personal competitiveness and have classified competitive behavior strategies.

Quasi-competitiveness (a dependent, irrational, destructive, short-term strategy or, in a competitive environment, an interaction along the S–S line) can be destructive and can work to the detriment of productive, substantive activity along the S–O line; it entails mistrust and is given a negative valuation by subjects in competitive interactions.

The dependent, rational, constructive, short-term strategy (in which competitive interaction between members is guided by certain rules and is accompanied by the assumption of definite roles) promotes enhanced performance, improved work quality, and mastery but shows “rational dependence” in competitive environment, irrespective of future prospects for activity in the context of a stable competitive environment.

Transformation or creation of a new object with positive economic effects as the subject matter of competition resulting from activity development is possible on the initiative of the subject; such creation outstrips the defined initial conditions

and creates responsiveness in the competitive environment, which forms the basis for a free, rational, constructive, long-term competitiveness strategy.

### Limitations and future research

Further analysis and study of competitiveness of personality requires taking into account such factors as the stages of human development as a subject of labor, gender differences, and affiliation with a specific professional group. Building competency models subject to further analysis of the data obtained and verifying validity and reliability using a standardized psychological tool will allow comparisons and descriptions of the most significant psychological resources for constructive-rational strategies of personal competitiveness as a subject of labor in order to analyze, predict, and correct destructive strategies for enhancing performance.

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