The Social Sciences 11 (22): 5408-5417, 2016
ISSN: 1818-5800

Functional Relationships of Identity Levels in Work Groups

[1]Andrey V. Sidorenkov, [2]Vadim A. Dorofeev, [3]Nina G. Keleberda and [4]Olga V. Pereverzeva
[1]Department of Psychology of Management, Southern Federal University,
13 Mikhail Nagibina Str., Apt. 238, 344038 Rostov-on-Don, Russian Federation
[2]Department of Psychology of Management, Southern Federal University,
13 Mikhail Nagibina Str., Apt. 237, 344038 Rostov-on-Don, Russian Federation
[3]Russian Customs Academy, 44 Temernitskaya Str.,
Apt. 514, 344002 Rostov-on-Don, Russian Federation
[4]Department of Social and Educational Activities, Russian Customs Academy,
20 Budennovsky Avenue, Apt. 211, 344002 Rostov-on-Don, Russian Federation

Abstract: The study studies linear and nonlinear relationships between three levels of identity (group, microgroup and interpersonal identity) on cognitive, affective and behavioral components in work groups. Two corresponding questionnaires were used for the study. The 331 employees from 37 groups participated in the research. Tangible linear relationship was clearly seen between microgroup and interpersonal identities in all three components. To a certain degree it was also seen between group and microgroup identities and there was absolutely no relationship between group and interpersonal identities. Nonlinear type prevailed in the relationships between the group and microgroup identity. In nonlinear relationship microgroup identity proved to be explicitly more determined by group identity. The most appropriate was quadratic functional relationship between these levels of identity. The peculiarity of this relationship lies in the fact that the increase of group identity is accompanied by a decrease in microgroup identity. It is true until the vertex of parabola is reached. At the point of inflection the trend is changing to the opposite: the further strengthening of group identity is accompanied, on the contrary, by an increase in microgroup identity. This transition had primarily manifested itself in affective component.

Key words: Levels of identity, group identity, microgroup identity, interpersonal identity, components of identity

INTRODUCTION

Psychology has developed two lines of identification and identity research, including group context. The first is focused on interpersonal identification and is characterized by some diversity in terms of theory and empirics (Petrovsky and Turevsky, 1979; Bandura, 1997; Kelman, 1958). Interpersonal identification is values' reference process between the participants of the interaction as a result of which one of the interactors adopt behavioral and personal characteristics of the other (Krichevsky and Dubovskaya, 1981). Identification process is partial in nature, i.e., an individual identifies himself/herself only with those people who are valued by him/her. Thus, the identification process affects only the most personally important attributes. Interpersonal identification plays an important role in social perception and communication, providing background for more profound knowledge of other people, being one of the mechanisms of interpersonal influence in intragroup communication, maintaining stable interpersonal relationships, etc.

The second line goes along social identity perspective, the key concepts of which are social and personal identities, collective and individual self, social comparison and social categories, prototypes and depersonalization, social attraction, etc., (Hogg *et al*., 2004). It emphasizes social identity that is connected with categorizing oneself and others and implies self-determination in terms of belonging to certain social categories in contraposition to other social categories (Turner *et al*., 1987). It is sensation of belonging of members of group to certain groups and degree with which they identify themselves as members of these groups (Ashforth and Mael, 1989). In 1990's increased interest to small groups within the framework of

Corresponding Author: Andrey V. Sidorenkov, Department of Psychology of Management, Southern Federal University,
13 Mikhail Nagibina Str., Apt. 238, 344038 Rostov-on-Don, Russian Federation

social identity perspective promoted coinage of 'group identity (identification)' construct. Its distinctive features are as follows: 'social identity' term tends to be considered as relating to major social categories while 'group identification' concept is more often applied to small groups and social identity is based on intergroup relations and distinctions (positive evaluation of one's own group as compared to other groups) while group identification is largely connected with intragroup processes and infers the group member's identification with the group and with each other (not necessarily on the basis of intergroup comparison) (Henry *et al*., 1999). Social (group) identity is well known to have impact on social perception, intergroup and interpersonal relations, individual and group behavior, including the context of organization. When employees identify themselves with organizational group, they perform more organizational involvement and organizational citizenship behaviors (Johnson *et al*., 2012) are more satisfied with their jobs (Mael and Ashforth, 1992) and report working harder (Ashforth and Saks, 1996). When group members share collective identity and they set common goals, distinct from other group's goals which contribute to their group goals commitment (Wegge and Haslam, 2003). Members of the high collective identity groups are motivated to work 'on behalf' of their groups or organization which in turn, decreases social loafing (James and Greenberg, 1989; Karau and Williams, 1993). Organizational identity is positively relation with professional ethics and quality of service and customer loyalty and satisfaction.

Social (group) identity is a complex phenomenon. In particular, some scholars single out different components in the structure of identity. For instance, Tajfel (1972)'s definition of social identity emphasizes cognitive and value-affective components. Hinkle *et al*. (1989) single out three group identification components: affective component, cognitive component and interconnection of individual and group interests. In turn, Henry *et al*. (1999) suggest cognitive, affective and behavioral aspects of group identification, treated as its source rather than components. The idea of three-dimensional model of group identity was also developed by Jackson (2002). To his opinion, group identity consists of cognitive, evaluative and affective-ties component. Some components such as cognitive and affective are also allocated in organizational identification as well as in multiple dimensions of group identity (Edwards and Peccei, 2007; Harris and Cameron, 2005; Johnson *et al*., 2012).

In an organizational context not only the structure of identity (identification) but also identity levels and their relationship are of interest. In tradition of social identity it is accepted to mark out personal and social identity. There are two points of view on a ratio of these levels. According to Turner (1985), between personal and social identity there is a mutual exclusion. Other words, the categorization of himself/herself as identity blocks perception of self as member of group whereas the categorization of self as the member of an ingroup differing from the member of an outgroup reduces perception of self as the unique individual differing from members of an ingroup. Deschamps and Devos (1998) develop idea about a complementarity between social and personal identity. Besides, researchers are focused on a ratio of such two levels as group and organizational identity (identification). Researches show that for employees the working group is often more significant than the organization (Knippenberg, 2000; Riketta and Dick, 2005). Therefore higher level of identification of individuals with the working group but not with the organization in general is usually observed (though there are exceptions). Despite researcher's fixed interest in this problem the relationship between of group and organizational identity still hasn't received full clarity (MacLean and Webber, 2015).

Summarizing studies on interpersonal and social (group) identities, one can reach some conclusions. First, interpersonal identification is more frequently regarded in dyadic relationship. Less often it is viewed in group context and is seldom or never seen in the context of socio-psychological group structure, i.e., inside informal subgroups, between members of different subgroups, etc. The study conducted production (work) groups and academic (school and college) groups showed that interpersonal identity is much more pronounced inside informal subgroups than in group on the whole i.e., between members of different subgroups, between outside members, etc., (Sidorenkov and Trishkina, 2010; Sidorenkov *et al*., 2014). Therefore, disregarding the group structure, one cannot obtain an accurate picture of interpersonal identity in the group. Second, microgroup identity, i.e., person's identification with a subgroup inside the group is hardly being studied enough. Yet subgroups emerge in various types of small groups throughout human life, fulfilling a number of functions to their members and the group on the whole. Microgroup identity is as important for intragroup processes as interpersonal and group identities. In particular, the aforementioned studies found that in groups microgroup identity manifests itself stronger than group identity. It indicates an asymmetry in levels of identities' manifestation in groups. System approach to the study of identity in a small group should consider degree of manifestation of group, microgroup and interpersonal identities as well as the nature of relations between these levels of identity. This will not only help define the

peculiarities of small group's identity but also to predict its dynamics in time perspective. In this view the issues of linear-non-linear functional relationships and forms of non-linear relationships are of great importance.

Multi-dimensional model of identity manifestation in a group: On the basis of the micro-group theory a multidimensional model of identity in a small group has been developed and it includes two dimensions: levels and components of identity (Sidorenkov, 2006, 2010; Sidorenkov and Trishkina, 2010).

Levels of identity in a group: A small group as a system has three structural levels of group activity: individual, subgroup and group. These levels definitely correspond with each other: in the context of group the level of the individual displays an element of system, level of subgroup-a subsystem and the level of group system, the level of subgroup often is a link between levels of the individual and group, each level is immanently presented in wider level, each level carries out certain functions in relation to others, between levels there are simple and difficult connections and levels aren't in a strict subordination but are dynamic in the interaction depending on internal and external living conditions of a group. As the subject of identity can be the individual and object of identity the individual, subgroup or group, so there are following levels of identity in group:

- Group (G): Person's identity with a group
- Microgroup (MG): Persons' identity with an informal subgroup inside a group
- Interpersonal (I): Identity between persons inside informal subgroups, between representatives of different subgroups between members not included in subgroups between representatives of subgroups and outside members

Components of identity in a group: Each level of identity includes three components: the cognitive, the affective and the behavioral. The cognitive component is a person's feeling of belonging to a significant other (an individual, a subgroup, a group) and integrative link with them, perceiving of oneself and others in conformity with the characteristics of the significant other. The affective component is a person's experience of being connected with an individual, a subgroup or a group and positive evaluation of this connection, experience of one's own accordance with the other and events occurring to him. The behavioral component is relatively permanent re-enactment of the other's significant characteristics in one's behavior as well as behaving in accordance to the other's expectations.

Thus, the purpose of this research is to study the relationships between group, microgroup and interpersonal identities (on the basis of the cognitive, affective and behavioral components) in small groups. We put forward the following hypotheses.

H_{1a}: The highest determination in all three components exists in the relationships between the levels in direct contact with each other: between group and microgroup identities, between microgroup and interpersonal identities.

H_{1b}: The highest possible determination is characteristic to the higher level compared to the lower level of identity, i.e., group identity determines microgroup identity, rather than contrariwise in its turn, microgroup identity has a higher determining impact on interpersonal identity, than contrariwise.

H_{2a}: There is functional relationship between the levels of identity in direct contact; between microgroup and interpersonal identities this relationship is more likely to be linear while a non-linear relationship seems to exist between group and microgroup identities.

H_{2b}: Parameters of the nonlinear relationship between the group and microgroup identities may have distinctive characteristics, depending on the components of these levels of identity.

MATERIALS AND METHODS

Participants: The 37 small groups of a different profile of activity and of the different organizations have been investigated. These are state institution, bank, motor show, agency of real estate, advertising agency, industrial enterprise, etc. The number of members in groups was from 6-17. The majority of groups consisted of 8-11 people. All groups had history and existed not <2 year. Total number of participants-331 employees aged from 18 till 59 year. Among them there were 51.7% of women and 48.3% of men. Some groups included only women, other groups-only men and the third both men and women.

Measures

Informal subgroups: The formalized method of allocation of informal subgroups in small group developed by Gorbatenko and Gorbatenko (1984) has been used. It combines sociometric poll of members of group on nonspecific criterion and special mathematical procedure of 'recognition of an image'. This allows 'without teacher' (i.e., without setting in advance the planned quantity of

subgroups or the number of the members included in subgroups) to allocate the subgroups and their memberships which are objectively available in group. This method gives the opportunity to allocate subgroups in which members are connected with each other not only directly but also mediately.

Interpersonal, group and microgroup identity: Questionnaire of interpersonal identity in a group and subgroups, QII and Questionnaire of group and microgroup identity in a group and subgroups, QGMI have been used for studying of levels and components of identity (Sidorenkov, 2012a, b; Sidorenkov and Pavlenko, 2015). The first questionnaire includes three subscales: cognitive identity, affective identity and the behavioral identity. It contains 12 items in the form of statements, four per each subscale. It is Laykert's 7-point scale (from completely agree, to completely disagree, to be used in it. The structure of QII has two parts: 'Among those, with whom I maintain close relations' and 'In the group on the whole'. The first part is intended for studying of interpersonal identity in informal subgroups and the second part -for dimension of this level of identity in the context of the whole group. The coefficients Cronbach's alpha were 72 (cognitive), 74 (affective) and 70 (behavioral).

The second questionnaire also has three subscales: cognitive identity, affective identity and the behavioral identity. Each of them is presented by four items so QGMI contains 12 items. As well as in the first questionnaire, the assessment is made by means of 7-point scale. The questionnaire consists of two parts: Community those with whom I maintain close relations and The group on the whole. The first part measures microgroup identity and the second part group identity. The internal consistency (the Cronbach's alpha) scores for subscales of group identity were 72 (cognitive identity), 78 (affective) and 66 (behavioral).

Procedure: Both questionnaires are included in the computer technology Group Profile (GP) and they are integrated with a formalized method of depicting informal subgroups and members not included in them (Sidorenkov and Pavlenko, 2015).

The research was computerized, applying GP and that allows: to ensure consistency of research conditions due to permanence of the implemented program to automatically control the work of the research participants as well as to block the research and to warn in case of skipping some tasks or misrepresentation of answers and to automatically process the results, etc. Functional capabilities of the software drastically raises the validity of the results obtained through the computer format of examination as compared with the paper format.

Methods of statistical and mathematical analysis: The following methods have been used: linear correlation, linear single-factor regression, squared correlation ratio, t-test, one-way ANOVA, Ordinary Least Squares (OLS). The type of functional relationship was selected on the basis of curve fitting with R^2 difference tests (SPSS 17.0 "Curve Estimation" module).

RESULTS

Informal subgroups in a group: In all tested groups (N = 37) informal subgroups (N = 65) were detected. At that the number of subgroups in groups varies from two to four (except for two groups, each of which has only one subgroup). On the average more than half of group members (55.0% individuals) were included in subgroups. In different groups the number of persons included in subgroups varies from 17.6-100% (in three groups all members are included in subgroups). Diads (52.4% of subgroups) predominate in groups, triads (26.2%) are also often met. subgroups consisting of four (10.7%) and five (10.7%) persons are formed much more seldom. The obtained results give grounds to investigate: interpersonal identity not only in a group on the whole but in informal subgroups, between representatives of different subgroups as well, etc., microgroup identity in addition to group identity and the relationship of microgroup identity with group and interpersonal identities.

Ensuring the integrity of the research process, we have been considering only the average of the results for three levels of identity among the members of informal subgroups. The reason for that is that microgroup identity manifests itself at its highest preeminently among the members of informal subgroups whereas outside members show considerably lesser degree of it.

Statistical estimation of the variables' mutual dependence: The main purpose of regressive models is to prognosticate the average value of the dependent variable as a result of the change of independent variable through a specific function. With the dependent variable given a priori, determination of independent variables becomes one of the objectives of regression analysis. However, if the variables are in complex relationships as is our case, it is important to define both dependent and independent variables. (The terms 'dependent variable' and 'independent variable indicate only mathematical relationship rather than actual cause-and-effect

Table 1: Pair-wise determination coefficient and correlation ratios between group, microgroup and interpersonal identities components components of levels of identity

Cognitive		Affective		Behavioral	
Squared correlation ratio	Correlation	Squared correlation ratio	Correlation	Squared correlation ratio	Correlation
MG→G = 0.31	0.06	MG¬G = 0.33	0.37*	MG¬G = 0.27	0.21
G→MG = 0.53		G¬MG = 0.42		G¬MG = 0.54	
I→G = 0.21	-0.06	I¬G = 0.41	-0.19	I¬G = 0.22	0.12
G→I = 0.36		G¬I = 0.26		G¬I = 0.29	
I→MG = 0.57	0.071**	I¬MG = 0.66	0.48**	I¬MG = 0.51	0.83**
MG→I = 0.61		MG¬I = 0.58		MG¬I = 0.58	

The arrow (¬) shows the direction of determination; 2) G = Group identity, MG = Microgroup identity and I = interpersonal identity; **p<0.001; *p<0.01

relationship). The problem can be partly solved through pair-wise comparison of squared correlation ratio (Glass and Stanley, 1970):

$$\eta^2 = 1 - \frac{SS_{wg}}{SS_{total}} \quad (1)$$

The more a variable's variation is influenced by the variation of another variable, compared to unaccounted factors, the higher is η^2. Conditional averages were calculated with an interval of 1 point (which is the unit of questionnaire measurement) of the variable which was regarded as independent in pair-wise comparison. To find SS_{wg} and SS_{total}, one-way ANOVA was used (Table 1).

Pair-wise determination between the components of the group, microgroup and interpersonal identity is ambiguous as to the degree and correlation of values of squared correlation ratio. The main results may be noted. First, unalterably high determination in all components was present in the relationships between microgroup and group identity, between microgroup and interpersonal identity (H_{1a}). Second, the difference (ratio) in pair components' determination was more evident between group and microgroup identities (in three components), between group and interpersonal identities (in two components) (H_{1b}). The pair-wise comparison of the identity levels found that of higher "prognosticating value" are: all components of group identity (for cognitive -η^2 = 0.53, affective -η^2 = 0.42 and behavioral -η^2 = 0.54) as compared to the components of microgroup identity (for cognitive -η^2 = 0.31, affective -η^2 = 0.33 and behavioral -η^2 = 0.27); cognitive component of group identity (η^2 = 0.36) as compared to the corresponding components of interpersonal identity (η^2 = 0.21) and affective component of interpersonal identity (η^2 = 0.41) as compared to the corresponding component of group identity (η^2 = 0.26). These results partially proved the first hypothesis, i.e., group identity is by far stronger in determining microgroup identity in non-linear relationship.

'Linearity-nonlinearity' assessment of the functional relationship between the variables: High linear correlation was found between microgroup and interpersonal identities in all three components. It was partly in evidence between group and microgroup identities (only in the affective component) and was nowhere in evidence between group and interpersonal identities (Table 1) (H_{2a}). The linear single-factor regression analysis of the relationship between microgroup and interpersonal identities was additionally used. It was aimed at evaluating the contribution of one level of identity to another. With interpersonal identity as a dependent variable and microgroup identity as an independent variable we have obtained the following non-standardized regression coefficient: for cognitive component -B = 7.38, Sig. <0.001 for affective component -B = 12.67, Sig. <0.001 and for behavioral component -B = 3.86, Sig. <0 .01. When taken conversely with interpersonal and microgroup identities defined by the dependent and independent variable, respectively the results varied to B = 4.20, Sig. <0.05 for cognitive component, B = 9.04, Sig. <0.001 for affective component and B = 2.93, Sig. <0.05 for behavioral component. The findings demonstrated that both levels of identity have mutual influence on each other. However, the degree of their influence (i.e., the index of non-standardized relationship coefficient) on the functional level is different. Changing interpersonal identity rather tends to result in intensive changes in microgroup identity, than vice versa.

At the previous stage of the study it was found that higher value of η^2 in conjunction with wider difference between η^2 and r_{xy} are primarily characteristic for the relation between group and microgroup identities in all components (Table 1). Therefore, the focus was made on "linear-nonlinear" search of the relationships between the components of group (independent variables) and microgroup (dependent variables) identity specifically. For the statistical estimation of the relationship's "linearity-nonlinearity" a t-test was used. Statistical validity of non-linear relationship is determined by the difference between η^2 and r_{xy}^2. As Table 1 shows, non-linearity can be principally found in the relationship between the components of group and microgroup identities (H_{2b}). The calculation demonstrated that η^2 is statistically certain to exceed r_{xy}^2 in cognitive and

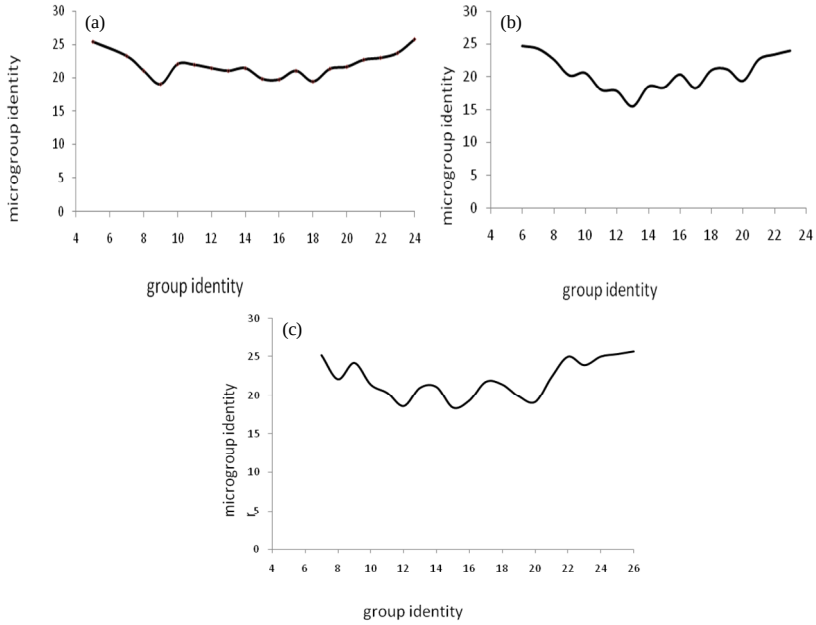

Fig. 1: Empirical curves of conditional average components of microgroup identity (dependent variable) in increments of 1 point in components of group identity (independent variable): a) cognitive component; b) affective component and c) behavioral component

Table 2: The results of the tests of linear and quadratic function relationship between the components of group identity (independent variable) and microgroup identity (dependent variable)

	Model summary					Parameter estimates		
Equation	R^2	F-values	df.1	df.2	Sig.	Constant	b1	b2
Cognitive component								
Linear	0.020	0.353	1	17	0.560	21.208	0.045	
Quadratic	0.702	18.849	2	16	0.000	34.544	-1.905	0.062
Affective component								
Linear	0.116	2.365	1	18	0.141	19.730	0.140	
Quadratic	0.714	21.236	2	17	0.000	37.434	-2.680	0.093
Behavioral component								
Linear	0.000	0.004	1	16	0.948	20.439	0.008	
Quadratic	0.785	27.406	2	15	0.000	30.709	-1.451	0.051

behavioral components (Sig. <0.05) while this superiority is less considerable in affective component (Sig. <0.08). It was the basis for the search of the functional relationship, most adequately approximating existing non-linear relationship between the components of the group and microgroup identities. The task was approached in two ways, graphically and by means of curve fitting with R^2 difference tests in SPSS 17.0 Software application ("Curve Estimation" module). The graphical solution is shown in Fig. 1.

There may be two kinds of functional relationship reflecting the relationship between the components of group and microgroup identities, parabolic and linear. In order to select a more appropriate model of these two types of functional relationships, curve fitting with R^2 difference tests were used (SPSS 17.0 "Curve Estimation" module) (Table 2).

For a non-linear model to be accepted, two requirements must be met: a non-linear model must have higher values of R^2 and Fisher's test than a linear model and a linear model must have Sig. <0.05. It was found that these requirements are met for quadratic function. Compared to linear function (Sig. <0.56 for cognitive component, Sig. <0.14 for affective component and Sig. <0.94 for behavioral component), quadratic function (Sig. <0.01 for cognitive component, Sig. <0.001 for affective component and Sig. <0.01 for behavioral component) is more appropriate to approximate regression model of relationship between components of group identity (independent variable) and microgroup identity (dependent variable).

Defining a regression model parameters: Ordinary Least Squares or OLS were used to solve this task. Going

beyond the parameter's values (Table 2), we have solved the set of equations for a second-order parabola. It should be noted that the parabola's parameters were quite different from those obtained from the curve fitting with R-squared difference tests (SPSS 17.0 "Curve Estimation" module). We obtained the following equations of parabolas (quadratic regression) showing how the average values of microgroup identity components change with the change of group identity components: 18.6 (for cognitive component), 15.1 (for affective component) and 16.7 (for behavioral component) (H_{2b}). The parameter's positive value with x^2 reveals the same trend for all three models with different identity components at the averaged values of the dependent variable (microgroup identity) (Fig. 1). Namely, an increase in manifestation of a component of group identity means simultaneous decline in manifestation of the corresponding component of microgroup identity up to a point where, on the contrary, further increase in the group identity components' manifestation is accompanied by an increase of microgroup identity components' manifestation. The calculation of the parabolas' vertices for each group identity component showed the following values: 18.6 for cognitive component, 15.1 for affective component and 16.7 for behavioral component. The values' difference means that a transition from one trend to another occurs differently for each component.

DISCUSSION

Group identity in all its components determines microgroup identity stronger than, vice versa, microgroup identity can define group identity. This may possibly be due to the role played by these identity levels in the life of a group or a subgroup, respectively. Thus, in the formal (institutionalized) groups studied group identity added to the group's unity, stability and achievement of the group's objective. It also forms the basis for interaction between the group members and outside members (e.g., members of other offices, departments, shifts, etc.,) from the perspective of the common stereotypes (prototypes) that define their identity as a group. Microgroup identity preeminently helps the group member keep contact with the subgroup and contributes to its integrity. It suggests that if success of the group as a whole, rather than informal subgroup, in any aspect is more significant for group members, we can assume that group identity is more relevant for them than microgroup identity.

Yet, one should not ignore the possibility of other combinations of the identity levels determination. For example, it was demonstrated that in the relationship between group and interpersonal identity the first level is stronger (in cognitive component) in terms of determination ability than the second level. At the same time the second level is stronger in affective component. All this gives us a picture of intricate cause-effect relationships between levels of identity in a group.

Microgroup and interpersonal identities are closely connected in a linear fashion and both levels can influence each other. And yet, a greater contribution to microgroup identity comes from interpersonal identity. To understand this relationship, one should understand the processes underlying the formation of informal subgroups inside a group. Subgroups emerge on the back of person-to-person affection, affinity in some qualities, relevant for the members. In general, a subgroup is formed on the basis of common interests and concerns which means that it can meet individual needs and expectations better than the whole group.

From the moment a group is formed and throughout its lifetime, its members make numerous interpersonal comparisons, i.e., they compare themselves with other group members as well as group members against each other, on a set of apprehensible attributes. There is a simultaneous process of personal similarity-difference intercomparison, resulting from personal attraction to some group members and the necessity to distance from others. Interpersonal contrasting allows for a more accurate categorizing of oneself and other group members. Manifestation of interpersonal identity is specified by certain similarities with others members and their relevance. It implies the importance of somebody else's experience, adoption and assimilation of some of their most important characteristics. Manifestation of interpersonal identification elements intensifies the processes of bringing people together in subgroups. As subgroups are being formed, the processes of intergroup comparison and intermicrogroup categorization (i.e., comparison against each other and categorization of the emerging subgroups inside the group) intensify. These processes contribute to differentiation in perception of subgroups and relations between them. Microgroup identity evolves along with these processes. It involves the following: an individual's feeling of being connected with his/her or other's subgroup and experience of such feeling; appraisal of how positive the subgroup membership is approval and adoption of the subgroup's characteristics (objectives, norms, values, etc); perception of self and other members in accordance with these characteristics. The member's behavior shifts from interpersonal level to microgroup level. In other words, a person in his/her behavior increasingly tends to rely on key characteristics of the subgroup and expectations of its members. In turn, increasing microgroup identity may have reverse effect on the increase of interpersonal identity.

Nonlinear connection prevails in relationships between group and microgroup identities with quadratic function being the most appropriate of all nonlinear models. Its peculiarity lies in the fact that an increase of group identity is followed by a decrease of microgroup identity. It is true up to the parabola's vertex. At the point of inflection the trend is changing: further strengthening of group identity is accompanied, on the contrary, by an increase of microgroup identity. This general trend can be explained in the following way. Categorization of self as the member of the group block perception of self as a member of subgroup. In many group context situations people think, feel and act in accordance with the characteristics of the group (group identity), rather than those of their informal subgroup. There may be said to be a mutual exclusion of group and microgroup identities in terms of not mathematics but psychology. In a point of fact as scholars note, people have as many social identities as there are groups to which they feel belonging (Hogg *et al*., 2004). Identities vary in their subjective value for individuals, regularity and contextuality of manifestation. However as it is commonly believed in specific situations only one identity comes as relevant, i.e., gives ground for self-construction, social perception and social behavior. Extrapolating this statement on our findings we can say that group identity is more relevant for the members than microgroup identity. At the same time our study demonstrated that this feature is not universal. That is to say, group identity increases to a certain point, when, on the contrary, microgroup identity starts to increase. This is due to the fact that at a certain point members are beginning to realize, consciously or unconsciously that further weakening of identity with their informal subgroup (with simultaneous strengthening of identity with the group on the whole) can result in loss of contact with the subgroup and hence to a loss of membership in it and finally to its partial or complete disintegration. People develop protective response by strengthening microgroup identity. It is therefore, possible that several identities, i.e., identities with different collective subjects, become simultaneously relevant. In this case a judicious assumption can be made on complementarity between group and microgroup identities in terms of their relevance for the members. As it is clear from the values of the parabolas' vertices (inflection points), transition from one trend to another appears first in affective and then in cognitive components. We believe that incipient imbalance between group and microgroup identities is first felt unconsciously on the emotional level (affective component). In time, a person comes to reflect (cognitive component) on the imbalance and understand it as undesired, threatening to the stability of microgroup identity.

CONCLUSION

Identity of individuals in small group is a multi-dimensional phenomenon which has several levels (group, microgroup and interpersonal). Each of them includes three components (cognitive, affective and behavioral). Levels of identity form a certain hierarchy from the point of view of the object's scale (group, subgroup individual) which members identifies themselves with. These levels have a different measure of expressiveness. They are also connected among themselves in particular way. Between the levels adjoining to each other (between interpersonal and microgroup, between microgroup and group) there is either strong (high correlation) and complete (on all three components) linear connection or weak and incomplete connection. Between two extreme levels (group and interpersonal) there is no linear connection. At the same time, between these levels there is a nonlinear link parameters of which have some difference depending on identity components. Having an idea of how one level of identity changes it is possible to predict change of another level and on its basis, change of forms of activity of members and group in general.

However there are several questions for further research. First, a study of relationships between interpersonal identity and other levels of identity should include various forms of interpersonal identity. Interpersonal identity can be personalized and depersonalized. In the former case an individual's identification with some group members depends on how referential and attractive they are and to what extent their personal characteristics are relevant for him/her ('I identify myself with this person because he/she has personal characteristics that I would like to have'). The latter case involves depersonalized identity, based on the extent to which individuals embody in their behavior the key characteristics of the group or subgroup. It is mediated by: microgroup identity ('I identify myself with this person because he/she and I identify ourselves with our subgroup') and group identity ('I identify myself with this person because he/she and I identify ourselves with our group').

Second, we were studying the relationship between the identity levels. However, the dynamics of these levels' relationship should be studied separately, for example, according to the nature of the group/subgroup interaction with the external context (integration, disintegration, relative social exclusion) and usefulness of the interaction result (success-failure).

Third, non-linear functional relationship between the components of group and microgroup identities may be

considered as an indicator of self-organization in small groups. It can provide a field for further research to model optimal pattern of formal groups' development in various organizations.

Fourth, the total picture of identity of workers will be complete when two more levels-personal and organizational identity are added to three levels mentioned above and links between five levels are studied.

Fifth, we studied formal work groups. We would be interested in studying relationships between the identity levels in other formal groups (e.g., military units, academic groups, sports groups, family) as well as informal groups (e.g., groups of friends).

REFERENCES

Ashforth, B.E. and F. Mael, 1989. Social identity theory and the organization. Acad. Manage. Rev., 14: 20-39.

Ashforth, B.K. and A.M. Saks, 1996. Socialization tactics: Longitudinal effects on newcomer adjustment. Acad. Manag. J., 39: 149-178.

Bandura, A.A., 1997. Social-Learning Theory. Prentice-Hall, Englewood Cliffs, New Jersey,.

Deschamps, J.C. and T. Devos, 1998. Regarding the Relationship Between Social Identity and Personal Identity. In: Social Identity: International Perspectives. Worchel, S., J.F. Morales, D. Paez and J.C. Deschamps (Eds.). SAGE Publications, New Delhi india, pp: 2-12.

Edwards, M.R. and R. Peccei, 2007. Organizational identification: Development and testing of a conceptually grounded measure. Eur. J. Work Organiz. Psychol., 16: 25-57.

Glass, G.V. and J.C. Stanley, 1970. Statistical Methods in Education and Psychology. Prentice-Hall, Englewood Cliffs, NJ., Pages: 596.

Gorbatenko, A.S. and T.M. Gorbatenko, 1984. A method for identification of the structure of a small group using formalized analysis of interpersonal selections. Questions Psychol., 4: 112-118.

Harris, G.E. and J.E. Cameron, 2005. Multiple dimensions of organizational identification and commitment as predictors of turnover intentions and psychological well-being. Canad. J. Behav. Sci., 37: 159-169.

Henry, K.B., H. Arrow and B. Carini, 1999. A tripartite model of group identification theory and measurement. Small Group Res., 30: 558-581.

Hinkle, S., L.A. Taylor, F.D.L. Cardamone and K.F. Crook, 1989. Intragroup identification and intergroup differentiation: A multicomponent approach. Br. J. Soc. Psychol., 28: 305-317.

Hogg, M.A., D. Abrams, S. Otten and S. Hinkle, 2004. The social identity perspective intergroup relations, self-conception and small groups. Small Group Res., 35: 246-276.

Jackson, J.W., 2002. Intergroup attitudes as a function of different dimensions of group identification and perceived intergroup conflict. Self Identity, 1: 11-33.

James, K. and J. Greenberg, 1989. In-group salience intergroup comparison and individual performance and self-esteem. Person. Soc. Psychol. Bull., 15: 604-616.

Johnson, M.D., F.P. Morgeson and D.R. Hekman, 2012. Cognitive and affective identification: Exploring the links between different forms of social identification and personality with work attitudes and behavior. J. Organiz. Behav., 33: 1142-1167.

Karau, S.J. and K.D. Williams, 1993. Social loafing: A meta-analytic review and theoretical integration. J. Person. Soc. Psychol., 65: 681-706.

Kelman, H.C., 1958. Compliance, identification and internalization: Three processes of attitude change. J. Conflict Resol., 1: 51-60.

Knippenberg, V.D., 2000. Work motivation and performance: A social identity perspective. Appl. Psychol., 49: 357-371.

Krichevsky, R.L. and E.M. Dubovskaya, 1981. On the Function and Mechanism of Identification in Intragroup Interpersonal Communication. In: Psychology of Interpersonal Cognition. Bodalev, A.A. (Ed.). Pedagogika, Moscow, Russia, pp: 92-122.

MacLean, T.L. and S.S. Webber, 2015. Navigating multiple identities across multiple boundaries a cross-level model of organizational identification. J. Manage. Inq., 24: 156-173.

Mael, F. and B.E. Ashforth, 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. J. Oraganiz. Bahav., 13: 103-123.

Petrovsky, A.V. and M.A. Turevsky, 1979. Effective Emotional Identification in a Group. In: Psychological Community Theory. Petrovsky, A.V. (Ed.). Pedagogika, Moscow, Russia, pp: 74-94.

Riketta, M. and V.R. Dick, 2005. Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. J. Vocational Behav., 67: 490-510.

Sidorenkov, A.V. and N.S. Trishkina, 2010. Empirical grounds for the model of individuals identity in small group. Psychol. J., 31: 17-29.

Sidorenkov, A.V. and R.V. Pavlenko, 2015. Group profile computer technique: A tool for complex study of small groups. SAGE Open, 5: 1-13.

Sidorenkov, A.V., 2006. Microgroup theory. Russ. Psychol. J., 3: 18-36.

Sidorenkov, A.V., 2010. Small Group and Informal Subgroups: The Microgroup Theory. Southern Federal University, Rostov-on-Don, Russia,.

Sidorenkov, A.V., 2012a. Technique of Studying of Interpersonal Identity. In: Methods of Social-Psychological Study of Small Groups in An Organization. Sidorenkov, A.V. (Ed.). Southern Federal University, Rostov-on-Don, Russia, pp: 133-145.

Sidorenkov, A.V., 2012b. Technique of Studying of Group and Microgroup Identity. In: Methods of Social-Psychological Study of Small Groups in an Organization. Sidorenkov, A.V. (Ed.). Southern Federal University, Rostov-on-Don, Russia, pp: 145-157.

Sidorenkov, A.V., I.I. Sidorenkova and N.Y. Ulyanova, 2014. Social-Psychological Characteristics and Effectiveness of Small Groups in the Organization. Mini Taip, Rostov-on-Don, Russia,.

Tajfel, H., 1972. Social Categorization. In: Introduction a La Psychologie Sociale. Moscovici, S. (Ed.). Editions Larousse, Paris, France, pp: 272-302.

Tumer, J.C., 1985. Social categorization and the self-concept: A social-cognitive theory of group behaviour. Adv. Group Process., 2: 77-122.

Turner, J.C., M.A. Hogg, P.J. Oakes, S.D. Reicher and M.S. Wetherell, 1987. Rediscovering the Social Group: A Self-Categorization Theory. Blackwell Publication, Oxford, ISBN: 9780631148067, Pages: 239.

Wegge, J. and S.A. Haslam, 2003. Group Goal Setting, Social Identity and Self-Categorization. In: Social Identity at Work: Developing Theory for Organizational Practice. Haslam, S. A., D.V. Knippenberg, M. Platow and N. Ellemers (Eds.). Psychology Press, New York, USA., pp: 43-59.