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## The Role of Group Size and Composition of Work Groups in the Implementation of their Functions in Relation to Group Members

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## Abstract

Introduction. This paper presents the results of a study of the relationship of the size (the total number of group members and the number of informal subgroup members) and gender and age composition of work groups with the extent to which they implement functions in relation to group members. The functions include (1) creating possibilities for realization of individual goals and meeting individual needs; (2) protection from external social threats; (3) informing (providing information to) members; (4) educating members; (5) adaptation of (providing adaptive capacities to) members; and (6) providing control and regulation. Methods. The study was conducted in 49 departments of companies with 4 to 14 employees (n = 290; 75.35 % women and 24.65 % men aged 21–70 years). In the first stage of the study, the Group Profile computer program was used, which included a formalized algorithm for identifying informal subgroups in the group. In the second stage, a printed form of a questionnaire on group functions related to group members was used. Data were analyzed using descriptive statistics, the Pearson Chi-square test, the nonparametric Mann-Whitney U-test, and the bias-corrected bootstrap. Results. The number of members included in informal subgroups (in relation to total group size) has a direct positive effect, while the total group size has an indirect negative effect (mediated by the number of group members in subgroups) on the functions that work groups carry out in relation to group members. None of the functions correlated with the genderrelated heterogeneity of groups. However, the function of providing information to members negatively correlated with the age-related heterogeneity of groups. Discussion. This study presents the first step toward understanding the antecedents of the functions

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that work groups implement in relation to group members. The results obtained can be used by managers and psychologists to solve practical problems. Further studies will investigate group composition based on other properties and group socio-psychological characteristics as antecedents of the functions that work groups carry out in relation to group members.

## Keywords

work group, informal subgroup, group size, individuals in informal subgroups, group composition, group functions

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## Introduction

Professional activities and an important part of the daily life of most people take place in work groups. They form a specific microenvironment with many dimensions that affect group members. The question arises in this respect: What contribution do work groups make to the activities, behaviors, mental state, and development of the members of these groups? This question directly refers to the problem of the functions of groups in relation to their members.

Researchers and practitioners often pay attention to the reasons for integrating people into small groups, including the following: a) achieving personal goals using group resources (Baron, Byrne, & Johnson, 2003; Robbins, 2006); b) meeting social needs in a group context (Baron et al., 2003; Oyster, 2004; Robbins, 2006); c) acquiring necessary information, new knowledge, and skills through social learning (Baron et al., 2003); d) desire for security in the face of social threats (Gebert & von Rosenstiel, 2006; Robbins, 2006); (e) self-determination through group identification (Baron et al., 2003); f) increased status and self-esteem (Robbins, 2006).

These reasons for integrating people into groups reflect, in essence, the functions of groups in relation to individuals, i.e. the benefits that groups can provide to group

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members. Certain functions are implemented not only by groups in which people want to enter, but also by groups they enter unintentionally. For example, when a person gets a job, he/she is driven mainly by material, career and other reasons, and not by considerations for finding a 'favorable' group for him/her. A person does not know in which work group he/she will find himself/herself. However, entering a specific group, he/she expects to receive certain positive effects for himself/herself from its membership.

The issues of the functions of small groups (including work groups) in relation to their members have not been sufficiently addressed in the scientific literature. However, this problem is important, since its study allows us to more deeply understand the activity of the group itself and its role in the life of its members. Several aspects of this problem can be distinguished, including (a) antecedents and conditions for the extent to which the group carries out each function, (b) importance of a particular function for group members, (c) associations among functions, (d) direct and indirect effects of each function, and (e) dysfunctions, etc. Thus, the antecedents of the implementation of functions by work groups may be qualitative and structural (for example, size, composition, internal communication network) and socio-psychological (for example, group norms and values, trust, conflict) characteristics of these groups, and conditions – the form of organizing joint activities (for example, joint-individual or group results), etc. In this study, we take the first step toward understanding the antecedents of group functions, starting with group size and composition.

This study **aims** to examine the relationship of the size and gender and age composition of work groups with the extent to which they implement functions in relation to group members.

# Functions of small groups and informal subgroups in relation to their members

In the context of this study, function is understood as the contribution of a system (group) in relation to its elements (group members). In other words, a function is such a relationship between the whole (group) and its parts (members), in which the very existence or some type of manifestation of the whole ensures the existence or some form of manifestation of the parts.

By generalizing the ideas on the reasons for integrating individuals into groups, the following functions of small groups (including work groups) in relation to group members have been identified: (1) creating possibilities for realizing of individual goals and meeting individual needs; (2) protection from external social threats; (3) informing (providing information to) members; (4) educating members; (5) adaptation of (providing adaptive capacities to) members; and (6) providing control and regulation (Sidorenkov, 2010; Sidorenkov & Borokhovski, 2024).

The function of creating possibilities for realizing individual goals and meeting individual needs involves the extent to which group members can meet their actual

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needs (especially social needs) and achieve the goals they cannot achieve apart from a group. The internal environment of a group must meet the needs of group members (Hackman, 1987). If the group environment constantly frustrates its members, then this negatively affects the moral and psychological state of individuals and the results of group activities. Therefore, the main objective of the function of creating possibilities for realizing individual goals and meeting individual needs is the self-satisfaction of group members in a group context.

The function of providing protection from external social threats implies providing group protection and support for individual members when they are threatened by outgroup members or other outsiders. This function is mainly implemented by the group when unreasonable threats from other individuals or groups arise, for example, in the form of obvious gratuitous aggression or unfounded claims. The protection functions can be implemented by the group as a whole or part of the group, i.e. by some group members. The content of this function indicates that its main objective is to provide individual group members with a sense of psychological and physical safety.

**The function of informing members** contributes to receiving information about: (a) individual in-group members; (b) certain aspects of in-group activity; and (c) the wider social environment, in particular out-groups and their members. The function of providing information creates the prerequisites for a high-quality exchange of information within the group, which in turn contributes to a successful interaction between members and achievement of group tasks (Wittenbaum, Hollingshead, & Botero, 2004). The main objective of this function is therefore to ensure that individuals have the necessary information for joint activities and to establish relationships with other in-group and out-group members.

The function of educating members contributes to the formation of work, professional, and socio-psychological knowledge and skills among group members. The first type of knowledge and skills is related to the mastery of tasks and conditions for their implementation by individuals. The second type is related to the rules and methods of interaction and relationships in various areas of group activity. In a group context, the formation of work, professional, and socio-psychological knowledge and skills may occur spontaneously, for example, in the process of joint activities (Hackman, 1987) or as part of targeted group training, for example, in team building (Klein et al., 2009). Consequently, the main objective of the function of educating members is the development of individuals in the subject-related and social spheres.

**The function of adaption of group members** is related to the extent to which a group contributes to interpersonal and instrumental (Riddle, Anderson, & Martin, 2000), socio-psychological, subject- and activity-related (Sidorenkov, 2010), short-term and long-term (Thoms, Pinto, Parente, & Druskat, 2002) adaptation of both full and new members. The main objective of the function of providing adaptive capacities to members is (a) to enable a group member to find a certain place in the system of interpersonal relations in the group in accordance with his/her interests and capabilities, on the one hand,

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and the group as a whole, on the other; (b) to ensure that individual activities meet the requirements of group activities.

**The function of providing control and regulation** results in the desire of the group as a whole or its trusted members to monitor the mutually shared goals, standards and positions of all members on issues of common interest to the group. Furthermore, the function of providing control and regulation includes the influence of the group on its members in order to strengthen appropriate and sanction inappropriate behavior, communication or joint activities. The influence of a group on a member of this group is carried out in the form of an openly expressed collective opinion or a certain action (inaction). It may be positive and expressed in the form of approval, but it may be negative, i.e. manifested in the form of censure and criticism (Rusalinova, Govorova, & Ilyina, 1983), sanctions against group members (Hollinger & Clark, 1982). The main objective of the function of providing control and regulation is therefore to ensure that the behavior and work activities of individual members are consistent with the objectives, interests, norms and thus the stability of the functioning of the group.

# The role of the size and composition of work groups in the implementation of their functions

Researchers often focus on the role of group size and composition for its sociopsychological characteristics, processes, and performance. For example, a significant correlation has been found between the size of work groups and intragroup conflicts (Choi & Cho, 2010; Sidorenkov, Borokhovski, & Kovalenko, 2018), group attraction (Kristof-Brown, Barrick, & Stevens, 2005), and self-satisfaction of group members (Roodt, Krug, & Otto, 2021). There are also relationships between group composition based on certain characteristics of group members and conflicts (Sidorenkov et al., 2018; Vodosek, 2007; Woehr, Arciniega, & Poling, 2013) and trust (Zheng & Wang, 2021) in groups, cohesion (Thatcher & Patel, 2011) and effectiveness (Fuel, Pardo-del-Val, & Revuelto-Taboada, 2022) of groups. Group size and composition are sometimes considered as moderators of the relationship between certain variables. For example, group size mediates the relationship between cohesion (Chaudhary, Chopra, & Kaur, 2022), trust (Morrissette & Kisamore, 2020) on the one hand, and group performance on the other. Composition (gender, age, education, and organizational tenure) contributes to the positive effect of distributive injustice on task conflict (Spell, Bezrukova, Haar, & Spell, 2011).

We hypothesize that the size and gender and age composition of work groups are related to the extent to which they implement functions in relation to group members. Firstly, small groups can implement certain functions more effectively than large groups because they can pay more attention to all members of the group, making them more effective in performing certain tasks (the function of creating possibilities for realizing individual goals and meeting individual needs, the function of providing protection from external and intragroup social threats) or control each member of the group (the function

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of providing control and regulation). The exception, in our view, are the functions of providing information to members, educating members, and providing adaptive capacities to members, since in a large group, the members have more opportunities (a) to receive information, which strengthens the function of providing information to members, (b) to observe a wide range of behaviors and activities of other members, to receive the necessary assistance, etc., which contributes to their learning and (c) to find a more satisfactory place for them in the structure of interpersonal relationships, which entails their successful adaptation.

The extent to which a group implements its functions may also depend on the number of group members of informal subgroups. Research has shown that in all work groups there are informal subgroups (Luan, Ren, & Hao, 2019; Sidorenkov, Sidorenkova, & Ulyanova, 2014), with the number increasing with the total group size (Sidorenkov & Shtroo, 2023). It can be assumed that the more group members are in informal subgroups, the more groups are able to implement their functions in relation to group members. This consideration can be argued briefly as follows. The informal subgroup implements all the same functions in relation to its members as the group as a whole (Sidorenkov, 2010). Furthermore, informal subgroups implement many functions more successfully than the group as a whole. Function implementation by subgroups is likely to compensate for the lack of function implementation by the group as a whole, at least in relation to the members of subgroups.

Secondly, the heterogeneity of groups related to the gender and age of their members may be negatively associated with the implementation of group functions in relation to the members of these groups. This is because behind the diversity of individuals in terms of gender and age, there is a hidden diversity in certain social attitudes, values, and stereotypes. With the wide diversity of its members, the group cannot meet the functional needs and expectations of each participant in the same way (i.e., implement its functions).

#### **Research hypotheses**

We formulated the following research hypotheses:

- **Hypothesis 1a**. The size of work groups is negatively related to their functions in relation to group members (with the exception of the functions of providing information to members, educating members, and providing adaptive capacities to members).
- **Hypothesis 1b.** The number of members included in informal subgroups (in relation to total group size) is positively related to the functions of work groups in relation to their members.
- **Hypothesis 1c**. The relationship between the size and functions of work groups is mediated by the relative number of members included in informal subgroups (Fig. 1).

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#### Figure 1

Schematic representation of indirect association in H1c



- **Hypothesis 2a.** Gender-related heterogeneity of work groups is negatively associated with group functions.
- **Hypothesis 2b.** Age-related heterogeneity of work groups is negatively associated with group functions.

## **Methods**

The study was conducted in 49 office departments of a government agency and three commercial companies with different profiles organizations' activities. The group size varied from 4 to 14 participants. Since the profile of the activities of organizations is quite different, the sample is representative in terms of ownership form and economic sectors. At the same time, the sample is unified in terms of the type of work activity, as the activities of all groups studied relate to office work.

The study sample comprised 290 employees, of whom 73.35 % were women and 24.65 % were men aged 21 to 70 (M = 36.83, SD = 10.58). Almost all regular employees participated in the study, except three who were absent due to illness or worked remotely.

To identify informal subgroups and their composition, the study used a formalized algorithm developed for this purpose (Gorbatenko & Gorbatenko, 1984). The Questionnaire on Group Functions in Relation to Group Members was developed to measure six functions of groups. The questionnaire contains six corresponding sub-scales, each with two items with reverse wording. An exception is the sub-scale of creating possibilities for realizing individual goals and meeting individual needs, which contains four items. Examples of items are as follows:

- "It is quite difficult for me to achieve my individual goals in this group" (subscale of the function of creating possibilities for realizing individual goals and meeting individual needs);
- "If another team employee (client, etc.) treats me with disrespect, aggression, etc., I doubt that the members of our group will stand up for me" (subscale of the function of providing protection from external and intragroup social threats);
- "Sometimes I am not sufficiently informed of what is happening in the group" (subscale of the function of providing information to members);

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- "This group gives me little opportunity to gain new experiences, knowledge and skills" (subscale of the function of educating members);
- "If a new member enters the group, it is unlikely that many members will assist him/her in his work" (subscale of the function of providing adaptive capacities to members);
- "If some members violate the unspoken rules of behavior and communication, this does not lead to an appropriate reaction in our group" (subscale of the function of providing control and regulation).

A 6-point scale was used to assess the items – from 1 (completely agree) to 6 (completely disagree).

The mean scores of the content validity of the questionnaire, which was assessed by three experts on a five-point scale, was maximum (5.0) for 12 items, and 4.66 for two items. The CFA procedure confirmed the six-factor structure of the questionnaire: df = 62,  $\chi^2 = 133.46$ , CFI = .971, TLI = .958, RMSEA = .062 [.048-.078], p = .000. The Cronbach's alpha coefficients of the subscales (Table 1) were above .800, except for subscale of the function of providing control and regulation.

The study was conducted at work in accordance with the administration of the relevant organizations and with the oral consent of the participants. The study was conducted individually. Each participant first worked on a laptop using the Group Profile computer program (Sidorenkov & Pavlenko, 2015), which includes a formal algorithm to identify informal subgroups in a group. He/she then filled out a printed questionnaire on the functions of the group in relation to its members.

## Results

Of the 49 studied groups, 47 were identified as informal subgroups, which number varied from 1 to 3 in different groups. Therefore, there were no subgroups identified in two groups; they were therefore excluded from further analysis. Most subgroups were identified as dyads (43.3 %) and triads (32.8 %), and significantly fewer subgroups consisted of four (19.4 %) and five individuals (4.5 %). 64.8 % of the employees were in informal subgroups.

Table 1 shows descriptive statistics, Pearson correlation coefficients, and Cronbach's alpha coefficients at the levels of work groups and informal subgroups, respectively. The relative size of informal subgroups was calculated as the ratio of the number of members in subgroups to the total group size. Two groups with no subgroups were excluded from the calculation. All variables were normalized before correlation analysis (converted to T-scores).

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#### Table 1

Descriptive statistics, Cronbach's alpha coefficients and Pearson correlation coefficients

Variables	М	SD	2	3	4	5	6	7	8	9	10
1. Group size	6.14	2.45	41**	.09	03	17	.06	25	22	08	08
2. Relative number of members included in subgroups	.69	.23	-	04	.04	.39**	.29*	.44**	.45**	.19	.34*
3. Gender composition	.25	.19			05	.09	.18	.01	.06	11	.13
4. Age composition	20.68	8,65				.46**	03	25	17	.06	17
5.Informing function	8.16	2.86				.861	.57***	.79***	.71***	.31*	.63***
6. Education function	9.19	2.68					.804	.52***	.56***	.42**	.55***
7. Creating possibilities function	17.51	4.72						.850	.70***	.33*	.72***
8. Protecting function	9.10	2.74							.921	.52***	.67***
9. Control and regulation function	9.38	2.32								.706	.46**
10. Adaptation function	9.91	2.41									.942

According to Hypothesis 1a, the size of work groups is negatively associated with their functions in relation to group members (with the exception of the functions of providing information to members, educating members, and providing adaptive capacities to members). Table 2 shows that group size is not significantly associated with any of the functions. Therefore, Hypothesis 1a was not confirmed.

However, we hypothesized that the lack of linear relationships can be the result of unequal sample sizes. It turned out that in our sample more than half of the groups (N = 27) consisted of 4–5 employees. Therefore, we divided the sample (M  $\pm$  1SD) into relatively small (4–5 people) and large (8–14 people) groups. Pairwise comparisons (Mann-Whitney U test) of each function in small and large groups (Table 2) showed a statistically significant difference (albeit small) between the degree to which these categories of groups implement the following two functions: (a) creating possibilities for realizing individual goals and meeting individual needs and (b) providing protection from external and intragroup social threats. Furthermore, as the average rank indicates, these functions are implemented by small groups much better than by large groups. For other functions

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there is no significant difference between these categories of groups. This result does not contradict Hypothesis 1a and enables us to clarify its formulation – compared to large groups, small groups implement better their functions in relation to group members (with the exception of the functions of providing information to members, educating members, and providing adaptive capacities to members).

#### Table 2

Functions	Ζ	p	Mean Rank
Informing function	-1.759	.082	21.52/14.55
Education function	32	.974	19.46/19.59
Creating possibilities	-2.302	.021	22.15/13.00
Protecting function	-1.965	.049	21.76/13.95
Control and regulation	725	.468	20.33/17.45
Adaptation function	-1.015	.310	20.67/16.64

Comparison of functions of relatively small (N = 27) and large (N = 11) groups

Hypothesis 1b suggests that the number of members included in informal subgroups (in relation to total group size) is positively associated with the functions that groups implement in relation to group members. It was found (Table 1) that the relative number of members included in informal subgroups was significantly positively associated with five functions of work groups but does not significantly correlate with the function of providing control and regulation. Thus, Hypothesis 1b was confirmed for five functions.

Hypothesis 1c suggests that the relationship group size and work group functions is mediated by the relative number of members included in informal subgroups. To test this hypothesis, the bias-corrected bootstrap (determining confidence intervals for statistical estimates) was used (Hayes, 2018). The analysis was conducted using PROCESS macro (Model 4) for the SPSS Statistics 23 software package. Variables were mean centered before analysis. If zero was outside the confidence interval, the mediation effect was significant. Table 3 shows that the number of members of subgroups (from the total group size) significantly mediates the relationship between the total group size and almost all the functions, with the exception of the function of providing control and regulation. Moreover, in all cases, the indirect effect is negative. Therefore, Hypothesis 1c was confirmed for five of the six group functions.

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#### Table 3

Indirect effect of the group size on functions of work groups

	Scor	e	95% CI		
Function models	ь	SE	Boot LLCI	Boot ULCI	
Informing function	090	.052	219	012	
Education function	084	.047	199	016	
Creating possibilities	211	.121	510	039	
Protecting function	127	.064	283	034	
Control and regulation	039	.044	139	.031	
Adaptation function	086	.049	206	013	

The degree of age-related heterogeneity/homogeneity of groups, measured in years (quantitative variable), was assessed by calculating the coefficient of variation. The higher this coefficient, the higher the diversity of group members in terms of this personal characteristic. Group gender-related heterogeneity (categorical variable) was determined by calculating the Blau index (Blau, 1977). It can vary from zero (complete homogeneity, 0/100) to 0.5 (maximum heterogeneity, 50/50). Hypotheses 2a and 2b suggest that group gender- and age-related heterogeneity, respectively, is negatively associated with group functions. No significant relationship was found between this compositional variable and any group function (Table 1). Thus, hypothesis 2a was not confirmed. However, a significant negative relationship was found between age-related heterogeneity of groups and the function of providing information to members (Table 1). This result enables us to conclude that hypothesis 2b was confirmed but only for the only group function.

## Discussion

Due to the limited number of studies on small group functions (including work groups) and the lack of literature on the antecedents of group functions, it is difficult to fully discuss our findings and to correlate the results presented with data from other studies. Nevertheless, we tried to analyze them.

We found that the extent to which groups implement certain functions depends on their size. Thus, small groups, compared to large ones, implement better the function of creating possibilities for realizing individual goals and meeting individual needs and the function of providing protection from external and intragroup social threats. Most small formal groups may provide more favorable conditions for group members to meet some

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of their social needs, including the need for inclusion, control, and/or affect (Schutz, 1958), positive self-esteem (Tajfel & Turner, 1986), belonging (Cooper & Thatcher, 2010), self-presentation (Roberts, 2005). These favorable conditions are first and foremost the capacity of the group to build stronger informal and close relationships and to pay greater attention to the individual needs of members. Most small groups also have stronger cohesiveness (Neubert, 1999), which may contribute to the function of providing protection from external and intragroup social threats. In large groups, in turn, losses in coordination and motivation (Gooding & Wagner 1985) and in group prejudice (Mullen et al. 1992) increase and the exchange of information deteriorates (De Dreu, 2007). These negative phenomena are expected to reduce the ability of the group to implement most of its functions.

We also found that the number of members included in informal subgroups (in relation to total group size) has a positive effect on five functions of the group (except for the function of providing control and regulation). That is, the more employees are in subgroups, the better the work groups are able to perform their functions. This result indirectly shows that informal subgroups perform most of the functions in relation to their members better than groups in relation to all group members (Sidorenkov & Borokhovski, 2024), and thereby compensate for the weak implementation of their functions by groups. In other words, the more members are included in subgroups and the more they are covered by their subgroup functions, the more members understand the overall implementation of group functions. Furthermore, the relative size of informal subgroups mediates the indirect relationship between the group size the and its five functions (except for the function of providing control and regulation). This indirect effect is negative. That is, the greater the group size, the fewer employees are included in informal subgroups and, as a result, the groups perform each of the five functions worse in relation to their members. Furthermore, there is a negative relationship between the group size and the number of subgroup members.

Particular attention should be paid to the function of providing control and regulation, which stands out among other functions. In other words, unlike other functions, this function does not directly affect the functional needs (in the broad sense) of the member (Sidorenkov & Borokhovski, 2024). If the majority of group members are personally interested in meeting social needs, obtaining important information, etc., then to a lesser extent they prefer that groups or subgroups control and influence them. Therefore, we consider that this function does not depend directly or indirectly on the group size and subgroup size.

As the results showed, group gender- and age-related heterogeneity is not associated with group functions. The exception is the function of providing information to members, which negatively depends on age-related heterogeneity. That is, the more group members differ in age, the worse the groups implement this function. The age

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diversity of individuals is likely to hidden their diversity in attitudes, stereotypes, or other characteristics, making it difficult to distribute information within the group and thereby members do not receive the necessary information according to their expectations.

The research results presented in this paper contribute to some theoretical knowledge of the activities of small groups and their role in individuals' lives in a group context. Specifically, the first step has been taken to understand the ancestors of the functions of groups in relation to their members. In other words, it has been shown that most of the functions implemented by groups are indirectly dependent on their size and directly on the size of subgroups. Moreover, group age-related heterogeneity negatively affects the implementation of the function of providing information to members.

The ideas and results of this study can be used by managers, HR managers, and psychologists to solve some practical problems. Knowledge of the group size/function relationship, subgroup size/function relationship, and group composition/function relationship makes it possible to predict the extent to which groups implement certain functions in relation to their members. In turn, knowledge of how a group implements certain functions is a kind of "litmus test" that indicates favorable or unfavorable "state" of the group as a whole from the point of view of: a) the mental state of its members (e.g. the function of providing protection from external and intragroup social threats and the function of providing adaptive capacities to members); b) the development of group members (e.g. the function of providing members); and c) the stability of group members functioning (e.g. the function of providing control and regulation).

### **Research limitations**

The study has some limitations. In our sample, most of the groups studied were small. Uneven sampling of groups throughout the sample could affect the results of the study. In addition, we studied only groups of office workers. However, in groups with other conditions for organizing the joint activities of group members, there may be specific characteristics of the relationship between the size and age and gender composition of groups and the implementation of their functions.

## Future Research

Our future research can make further strides towards understanding the role of (a) group compositions in terms of other characteristics of group members (e.g., education, personal traits, values) as an antecedent to the functions of work groups and (b) sociopsychological characteristics of groups (e.g., certain group norms, trust within the group, relations between subgroups) as predictors of the implementation of group functions in relation to their members.

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## **Author Contribution**

**Andrey Vladimirovich Sidorenkov** developed the concept and purpose of the study, analyzed the relevant literature, planned and organized the study, performed statistical analysis of data, and wrote the manuscript text.

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**Yulia Vladimirovna Obukhova** collected the data, performed primary data analysis, wrote and edited the manuscript text.

Anastasiya Ambartsumovna Eribekyan collected the data, performed primary data analysis.

**Daniil Sergeevich Ignatov** collected the data, performed primary data analysis and statistical analysis of results.

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## **Conflict of Interest Information**

The authors have no conflicts of interest to declare.