A PROJECT TEAM: A TEAM OR JUST A GROUP?

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Abstract

This paper deals with issues related to work in either teams or groups. The theoretical part which discusses a team and a group with regards to its definition, classification and basic distinction brings in more on the typology of team roles, personality assessment and sociometric methods. The analytical part tests the project (work) team of a medical center represented in terms of personality and motivational types, team roles and interpersonal team relations concerning the willingness of cooperation and communication. The main objective of this work was to determine whether the existing team is not by its nature rather a working group that contributes to the generally perceived stagnation of that field.

Keywords: Social Group, Sociometry, Team Work, Personality Type, Team Roles, the MBTI, the LJ Sociometric Questionnaire

1. Introduction

The team, teamwork, mutual communication… There are only few other terms that are so inflected in health care. Where to look for explanations? In the contemporary trend of medicine and science atomization… It was medical science, which forcibly separated somatic and mental processes, unfolded a human being into organ systems, organs, tissues, cells and cell particles and this science finally collapsed into many specialized fields. On the one hand, due to this mentioned fact, it has made groundbreaking knowledge on the structure and function of the human body and thus the disease, on the other; it lost the ability to maintain complex psychosomatic approach. The call for integration as a counterpart to specialization and atomization echoes nowadays more and more not only at the level of individual fields, where the internists boast the largest current activity, but also throughout the whole health system. This creates interdisciplinary fields of action across a range of medical and health care, sort of modern medical symbols of cooperation among associate doctors and paramedical staff, postgraduate researchers, biologists, pharmacists and many more. In concrete form of work teams and groups they represent a “back seat” synthetic view of solving problems associated with the loss of human health.

The medical centers operate with numerous working groups and teams that to varying degrees affect the normal operation and professional lives of employees. Their practical benefits and a sense of action can be assessed on the basis of general awareness of individuals and the whole organizations, leaders, ongoing communication and presented activities, or services of these social groupings. In this paper the analyzed interdisciplinary team consists of nine
employees of the medical center from different departments of the same level in the organizational hierarchy. The composition of the top management was conducted by a physician specialist several years ago. The aim was to form a project team with the primary task of developing a practical approach to field outputs for routine clinical practice. Activities of the team proceed to date continuously, yet its primary task was not reached in the opinion of the authors. A team grouping including a personal leadership team is viewed as inefficient by majority; awareness of the team potential remains within the work organization is minimal.

The main goal of this work is to verify the validity of the assumptions that the analyzed team represents a very disparate group as for its composition from the perspective of personality types, types of motivation, team roles and interpersonal relations in terms of the willingness of cooperation and communication. A separate output shall focus on sociometric investigation of those team members where willingness to work together and communicate is based on the authors’ assumption of tight interdependence.

2. Methodology

The theoretical part of the work is handled in the spirit of essential characteristics and performance of key terms and definitions that are in the present paper only briefly mentioned. In the case of a social group the attention is focused on the working group and identifies specific differences of team work, at the same time sociometry is discussed as well. In the case of a work team, the team typology is analyzed with a more detailed description of the project team. Typology of personality, motivational types and team roles are outlined in the methodology MBTI1 (Skeletus Personality Test, 2013), in motivational types ‘test and team roles’ test by Meredith Belbin.

The analytical part processes characteristic of the test set, the methodological introduction and its own analysis, data processing for each methodology. The largest space is devoted to presenting the results of the MBTI, the test of motivation types, the test of team roles and LJ sociometric questionnaire of willingness to cooperate and communicate. The results are presented separately for each team member, along with the final team evaluation. In the case of LJ sociometric method results are compiled in a sociometric matrix of their willingness to cooperate and willingness to communicate and the team final evaluation is added at the same time.

The main reasons for this analysis were caused mainly by:
- systemic deficiencies of health organization in shaping the project and work teams,
- tolerance and inertia of project teams at their current lack of objective value to the healthcare organization,
- unclear position of interdisciplinary fields in the hierarchy and healthcare organizations,
- existing competition among members of the project team working together,
- questionable willingness to cooperate among members of the project team,
- questionable willingness of communication between members of the project team that resulted not from the lack of communication channels, but from the willingness to cooperate with specific individuals,
- the possibility to work as an independent arbiter of the evaluation project work team.

2.1. The Test Sample

The test sample represents a nine-member team in a hospital. The original intention was to establish the project team that would assist in creation of the interdisciplinary medical field with a broad outreach to the problems of natural sciences, pharmacy and laboratory complement. During time the team underwent a smooth transition into the work team that is responsible for the practical implementation of the field in general clinical practice and operation of medical equipment.

The team’s composition is constant throughout its existence, which amounts to 10 years. The team is represented by nine members, including four women and five men. Position of individual members of the team reflects the workload. In addition, the team is regularly involved in contact with other bodies and institutes of the medical center and it works with the drug commission, a department of quality control and an inspection department of finance and analysis, etc.

Given the breadth of activities that are analyzed by the team and consequently implemented, it is necessary to have a clear team vision, clear communication and subsequent teamwork.

2.2. The Tools and Methods

In order to proceed the analyzed topic, four research methods were applied in the following order:

1) To identify the basic traits of individual team members the MBTI (Myers Briggs Type Indicator) personality test was applied.
2) To identify the motivational foundation of individual team members, the testing of motivational types of people by Plaminek was applied.
3) To identify team roles of each team member questionnaire by Belbin was used.
4) To analyze the willingness of cooperation and communication between team members the LJ sociometric questionnaire was employed.

Testing of team members was conducted individually by gradually filling in forms with various tests and questionnaires.

2.3. Analyzes and Data Processing

- **The MBTI personality test**: In order to analyze, evaluate and complete the questionnaire, the MBTI personality test that is freely accessible online was used. The printed form were completed by individual team members and subsequently commissioned to online evaluation. The questionnaire included a total of 56 questions with two possible answers, and only one was allowed to be selected. There was no time limit on test completion. Test outputs consisted of four-digit code indicating personality type, this score highlighted the percentage difference for each pair of characteristics and temperament. Preferential two properties represent the following options (initial letters of individual preferences were taken from the English originals):
  - Extroversion (E) - Introversion (I)
  - Sense (S) - Intuition (I)
  - Thinking (T) - Feeling (F)
  - Judging (J) - Perceiving (P).

Every evaluated pair could reach a maximum of 14 points. The data were processed for each team member with a graphic representation of the points achieved for individual properties. At the same time the percentage distribution of preferential pairs of properties with actual test outputs were processed for clarity in a table form. The team representation of personality preferences and temperaments was separately shown in graphic form.

- **Test of motivational types of people according to Plaminek**: In order to analyze, evaluate and complete the questionnaire, we used literary materials available. The printed forms were completed by individual team members and subsequently evaluated by plotting numerical values to the graphic board. Self-testing consisted of two parts separately evaluating the distribution of preferences between the usefulness and effectiveness and the dynamics and stability. Each part of the test represented a total of 14 pairs of the options; each pair could get only 5 points. There was no time limit on test completion. Test outputs consisted of point value scales measuring the distribution of these preferences.
Preferential pairs of opposing characters were (abbreviations of individual preferences were adapted from the English originals):

- Usefulness (U.S.) - Efficiency (Ef),
- Dynamics (Dy) - Stability (St).

Every evaluated preferential pair of characters could reach a maximum of 70 points. The data were processed for each team member with a graphic representation of the combination of the two scales in the typology of people. Point values of individual preferences were for clarity shown in a tabular form. At the same time, team composition in terms of representation of motivational types was separately shown in graphic form.

- **The Belbin questionnaire of team roles:** In order to analyze, evaluate and complete the questionnaire, we used online materials available. The printed forms were completed by individual team members and subsequently evaluated by plotting point values in the team roles table. The questionnaire consisted of seven sections marked with Roman numerals. Each section monitored people’s approach to 10 tested claims related to specific areas of teamwork. Individual statements of sections were typical for a particular team role. Number of chosen claims in the sections was not limited. There was no time limit on test completion. Test outputs were formed separately for each section and point values were assigned to the identified statement.

Highlighted statements in each section could have been evaluated in the sum of the maximum of 10 points. The data were processed for each team member in tabular expression of point values for each team role. Team roles with the sum of 10 points and above were highlighted in bold. They represent those roles that are taken on by team members spontaneously. Team roles with the total sum of 6-9 points are for a tested person conditioned by situation. A graphic form separately showed a team composition in terms of both spontaneous and conditioned team roles.

- **The LJ sociometric questionnaire:** In order to carry out own analysis a simple questionnaire was compiled. It includes a brief justification of own investigations, the denominator table to facilitate the identification of the tested person and other team members and 2 simple questions on co-workers preference and communication. Each question offered the tested person 3 options listed by intensity. First place in this case means the most preferred person in the team.

The results of preferences were adjusted by weighted average cost method, where first selection got 3 points, the second choice received score of 2, and the third option was assigned by 1 point. The results were furthermore compiled in tables separately for their willingness to cooperate and willingness to communicate. The table (sociometric matrix) characters are distributed subsequently – symbols of tested team members are listed in the left column, the rows consist of selected values chosen by individual team members. The first line of the table records the sum of all the options in each column, the second line consists of adjusted values because of total weight, and the third line gives the final order of weighted values. Again, we separately graphically illustrated the results of the weighted selection of test team members' willingness to cooperate and communicate.

### 3. An Overview of the Current State of the Topic

"The work and labor sphere in general constitute central roles in the lives of each of us as we spend work activity as either an employee, or an employer or an self-employed most of our lives. For many, work is merely a shorthand mean of raising funds that are necessary to satisfy our material needs. On the other hand, work activity itself and the associated relationships are reflected in the social and psychological level of any person. The family life and work life are the most important means of our anchorage in a society. The work activities represent the opportunity to have a contact with the immediate environment, provide a sense of usefulness, fulfillment and self-realization." (Červenka, 2013, p.3).
A pioneer who devoted his time to a research on interpersonal relationships in the workplace at the beginning of the last century was American Elton Mayo. He argued that more favorable working and interpersonal relationships and higher levels of social contact would increase the performance of workers (Mayo, 2003, p.105).

“Our work constitutes a social activity that is carried out in relationships and interactions with other people, and within the given social conditions. These conditions are reflected in our business, at the same time our own activities influence the immediate social environment. Our social needs are met and are being developed right through these social relations. The healthcare sector especially is characterized by the need to provide and receive help. The basic division of social relationships in the workplace is into formal and informal ones. Formal relations arise from the organizational structure of social units, are defined by organizational and working conditions of employment of the parent company. Informal relationships are established on the basis of personal needs and priorities and subjective preferences. Our identification with the workplace and co-workers happens mainly through informal relationships” (Pauknerová, 2012, p.198).

The individual is becoming a minority in the working process nowadays, as there is a tendency to rather associate workers into groups and teams.

3.1. A Social Group

Each of us became in the course of life a part of many social groups. On the one hand, this participation shapes our attitudes and beliefs, ideas and values, on the other hand it enable us to fulfill our social needs.

A social group is a social unit with the following characteristics:\footnote{Translated from the article entitled “Sociální Skupina” [Social Group] in Czech. Available at: <http://cs.wikipedia.org/wiki/Sociální_skupina> [15 June 2013].}

- Consists of two or more persons holding complementary and conditioning roles.
- Individuals in the group are combined by communication, standards and expectations, including the activities performed together.
- Separate parts of the social groups are characterized by structural or functional significance, which segregates them from the individuals.

“It is always an internally and functionally interconnected unit; its existence is guaranteed formally or informally by established rules and set of standards including the relatively stable and anchored forms of compliance monitoring. Failure to comply with the rules and group norms is associated with a punitive sanction” (Pauknerová, 2012, p.201).

Within the group the social interaction, communication and influence are applied, while there are social positions, roles and statuses (Managementmania, 2013a).

Social groups are typical by specific internal values and standards that may be consistent with or in contrast with the system of values and norms of society. Social interaction is understood to be an interaction between individuals, individuals and groups, and the groups themselves. In essence, they feature different forms of verbal and non-verbal communication. Social communication is understood as not only way of information transfer, knowledge, questions and instructions between individuals, but also misinformation and communication noise. A process of interaction and communication gives an individual a certain social influence within a group, which corresponds with the social position. The position of a person is regulated by a set of rights (social status) and obligations (social role).

Social groups can be classified (Reichel, 2008, pp.119-128):
- on the basis of professional qualification structure,
- based on socio-demographic structure,
- based on economic function,
- based on social function,
- based on social identification,
based on priority, where the primary group means a small group of high degree of cohesion (such as family) and secondary group numerically extensive group formed for a specific purpose and characterized by clearly defined roles of its members (for example working group)

- based on the size of the group, which consequently determines the nature of social interaction. Small groups constructed from 2 to 20-40 members are an example of direct interaction and a larger group constitutes an example of indirect mediated interaction. The characteristics of a small group represent a group consciousness of values, norms and attitudes. Common activities and place of existence, the motive and a goal separate the group from its surroundings, stable relationships and given structure of social positions and roles.

3.1.1. A Working Group

It is an example of a small formal social group that emerged in the workplace in order to reach working or organizational goals. It forms the inner and functionally interconnected unit, which is characterized by clearly defined structure of professional positions, roles and specific set of internal values and standards. The set of group values and norms should be under ideal conditions based on the values and norms of a working organization.

On the basis of the classification priorities criteria, a working group falls into the secondary social group, but its definition is not as unambiguous (Pauknerová, 2012, p.202). For individuals, the working group may represent the total residence time in the group and can gain the primary position. The workers of medical fields are typical examples. They often create strong emotional ties within the group and the working group becomes a family substitute.

The success and effectiveness of the working group is determined by psychological climate, according to the following determinants (Pauknerová, 2012, p.202):

- size of the working group,
- composition of the working group,
- system of communication and interaction within the group,
- style or manner of leading the group.

3.1.2. A Working Group versus a Working Team

Concepts a working group and a working team are often used interchangeably. Despite the presence of a number of common characteristics, both cases are substantially different.

"The concept of working groups implies the concept of a team. Consequently, we can derive the simple proposition that every team is simultaneously the working group. Yet, the working group does not automatically mean the team." (Dědina and Odchádzel, 2007, p.84).

Indeed, a working group and a working team differ significantly.

Teams are mainly focused on the task and it corresponds with their composition, which represent people with different, but complementary properties. Their position is equally important; therefore a hierarchy is not so much emphasized (Mühleisen and Oberhuber, 2009). Norms of a team tend to focus more on the task than those of working groups (Hayes, 2008).

Everything is finally evaluated from the viewpoint of the final goal and not as a measure of standards. A number of team members should be limited due to importance of direct communication. Basic differences in the working group and the team are listed in further work (Kolajová, 2006, p.14). Specific differences between the working group and the team further specify book of Bedrnová and Nový (2009).

Notwithstanding the previous comparison, the conclusion can define the fundamental difference between the working group and the working team. The working group is intrinsically connected by only the same interest and not the aim, while the working team is formed because it has the same target and tries to achieve this goal.
3.2. A Working Team

A working team is clearly defined as a limited group of people, with time bound tasks, a particular objective, clearly defined rules, roles, and characteristic work process (Kantorová, 2013). The team requires of its members individual responsibility and mutual accountability (Armstrong, 2007).

Formation of teams is based on the idea of higher working efficiency of a group as opposed to individuals who operate independently. Characteristics of a good working team are (Hayes, 2008, p.25):
- genesis of positive attitudes and beliefs,
- team hierarchy accepted by all members,
- awareness of the reasons for the team formation and all members position within it,
- clear internal communication of team members, as well as the communication of team members with anyone outside of the organization,
- a style of managerial leadership encouraging positive team features and reversing the destructive influences.

3.2.1. Typology of Working Teams

Work teams can be broadly classified on the basis of a number of criteria, such as:
- life → teams temporary and permanent,
- sizes → large and small teams,
- relation to its surroundings → teams opened and closed,
- subject → such as economic, political, medical teams
- site of action → local, regional, national, transnational teams and more.

For practical application, a typology of work teams based on team goals and the type of production is pinpointed. Individual teams score is based on their differences from the rest of the organization, the degree of cooperation with other members of the organization, working cycle and typical outputs.

Teams can be according to typology of working teams split into (Managementmania, 2013b; 2013c):
- **Advisory teams** – they are developing consultancy on issues of work organization and decision making. "The advisory team consists of members of the senior management of the organization" (Hayes, 2008, p.145).
- **Production teams / teams providing services** - are characterized by a high degree of autonomy within the organization. The purpose of their work is to ensure smooth production or services.
  - The characteristic features are (Dědina and Nový, 2007):
    - routine
    - constant number of team members.
- **Action / negotiating teams** – they repeatedly carry out specific activities in response to changing environmental conditions. The hallmarks of this type of team are clear leadership and the exact definition of the roles of individual members.

3.2.2. A Project Team

"A project team marks all persons involved in the project. In a narrower sense, the project team consists of the project manager and project team members, which are appointed across the organizational structure in accordance with a matrix organizational structure"3. Each project team member takes a particular role with the exact specification of the position and clearly

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defined powers and responsibilities. The team is disbanded once reaching task, or continues in operation by entering a new task.

"The leader of the project team (a project manager) is responsible for achieving the stated objectives of the project. The role of a manager expects not only knowledge and skills but also personal qualities such as emotional stability, empathy, communication, greater stress resistance, flexibility or logical reasoning" (Štefánek and Hrazdilová Bočková, 2008, pp.139-140).

Ideally, the project manager is a natural team leader, with capability to lead personalities, remove barriers to others, inspire, make decisions, encourage and reward.

The management of the project team generally brings these obligations (Bendová, 2012):

- planning,
- deciding,
- organizing,
- controlling,
- representation of the team on the outside,
- mediation and facilitation of team dynamics,
- motivation of team members.

Individual members of the project team take the team roles that are the result of combination of personality, inborn traits and experience to situational requirements. For this reason, some team roles are advocated by individuals spontaneously (depending on individual personalities), and some only in the case when the situation demands it (role postures as needed).

4. The Results

The thesis analyzed the interdisciplinary project team working in a medical facility. The analysis showed:

- The team is balanced in terms of personal preferences (MBTI) - the distribution of preferences is rarely balanced, the prevailing preferences represent introversion, senses, thinking and reasoning. The strongest features are discretion, practicality, logic, high self-control, determination and coherence. Based on the prevailing preference in terms of compensation the weaknesses of the team, the most risky seem situation in the case of reasoning that prevails significantly over perception. Along with a lower proportion of extraversion it can therefore easily lead to excessive conservatism and working routine. The team is doing business as usual, does not generate new ideas and thoughts.

- The team is balanced in terms of temperament (MBTI) - the most represented temperaments are the Epimethean focusing on responsibility, tradition and order and the Promethean focusing on skills, knowledge and control. On the contrary, the team lacks the Dionysian temperament characterized by its freedom, independence and experiencing joy. The distribution of temperament corresponds with consideration of the balance of the team as for personal preferences.

- Again, the team is in balance in terms of motivational types (test of motivational people types by Plamínek, 2008) – a layout of motivational types is balanced in case of drivers, explorers and harmonizer. A specialist is represented in team by only one member. Since people with a dynamic focus predominate – drivers and explorers, we can assume a significant number of conflicts caused by personality differences. These conflicts show uninteresting parallel with the old age rivalry between medicine and pharmacy.

- The team is balanced in terms of team roles (testing according to Belbin team roles test) - the largest representation among spontaneously interesting roles are team workers, followed by analysts, developers and implementers. The team structure suggests a strong sense of belonging, composure, and diligence together with efforts to complete common tasks and problems. The team lacks innovators in search of resources and surprisingly specialists, whose role is championed by team members primarily according the situation.
The distribution of team roles indicates an overall tendency to routine and accustomed order, minimum innovation and discussion missing the practical output together with the lack of professional confidence.

- There is internal team willingness to cooperate and communicate (LJ sociometrics) - preference to work together virtually coincides with the preferences for communication. The team is most willing to cooperate (interact) with the member who takes the role of an implementer and a team worker. As for the personality type the member A is a principled man who puts the interests of others above his own. On the other hand, he does not like to gamble and is afraid of being the center of attention, and therefore counts among traditionalists. The second place in team collaboration and communication preferences took the member G, an implementer, a team worker and an analyst. As a human, he is practical, carrying and reliable, not afraid of decision and responsibility. However, he may seem excessively bureaucratic to his surroundings. Based on the team's preferences the third place was given to the member I – a team worker and an implementer. He is a friendly and altruistic person who avoids controversy and strife. Absence of ambition and competitiveness seems to be a disadvantage. From the above it follows that for the test team, collaboration and communication are crucial, the roles of the team worker and the implementer are the most important, in other words, the team appreciate considerate and friendly person, who is always trustworthy. These characteristics suggest a certain presence of conservatism in the team, at the expense of imagination, ideas and healthy risks that could help to fulfill the vision of the team and deliver results. Fourth, fifth and sixth place went to the team members C, D and E. The dominant team's roles were an analyzer, a coordinator and a molder for the members C and D, in the case of the member E it was a team worker. By personality these are people of a social nature, independent, to some extent even original. In addition the members C and D have dominance in low surrounding tolerance. The pursuit of innovation, along with the obvious superiority over the others in a common discussion certainly contributed to their lower overall popularity. The seventh place was taken by the member H, a search resource coordinator and a specialist, who has the reclusive and unemotional personality. His theoretical focus, along with a tendency to disorder can be a major cause of his final position in the investigation. The worst ranking gained the members F and B. The member F is an implementer and team worker, the member B is a molder and an implementer. By personality characteristics the member F is an inaccessible, serious man who achieved success with his hard work and diligence, the member B is a private person living with a little head in the clouds. The reason for their final position seems to be caused by the personality profile where their inaccessibility is combined with communication problems.

5. Summary

The above discussed analysis of the project team proved the assumption that the existing interdisciplinary working team is perceived to be rather a working group.

How the work of the project team has transformed into the working group? We might toy with the idea that the working group was formed at the very beginning. The team composition accepted only one common parameter, namely work activities. The ultimate goal of integration of interdisciplinary activities within the organization inevitably remained unfulfilled. Or was it only a working production team? The reason for speculation would be its repeated long duty cycle, or the number of permanent members with one basic idea to justify the existence of their own profession. Most likely, however, the project team was built incorrectly straight from the beginning, its wrong direction and senior management tardiness resulted in job resignation and its routine, comfort and lack of new ideas remained a sad memento of the original idea. The team composition supports the idea – the roles of an innovator and a talent scout are absent, together with the lack of personal preference and perception of a motivation type a specifier.

How to proceed to the regeneration of the existing working group and recreate the real working team? What to recommend for further work of that team? There are 2 options to be contemplated:
1. To try to reform the existing group in the team by:
   - reduction of the number of current members of the team with the target number of 6, a smaller number is preferable for cooperation and communication “face to face”, also in the current team we may detect small interest groups which may be represented by only one member in the future,
   - building a new atmosphere in the team through open communication, mutual support and focus on the future,
   - formulation and adoption of new goals acceptable by all team members, specific objectives must be measurable, acceptable, realistic and time limited,
   - amending existing rules and procedures for working together in a spirit of transparency and summarization,
   - change of managerial style of group leadership, present free style exchange for group-oriented, democratic, and participatory.

2. To terminate the existing working group and create the new project working team by:
   - asking new employee for help, anyone with a close relationship to the existing inter-sectorial collaboration, ideally acting outside the current team, but knowledgeable of relations,
   - the usage of external consultants who would cooperate in the adoption of new team members and build it according to the principles of proper representation of team roles,
   - prevention of the interest group formation in the working team, pursuing more private and departmental goals than team goals.

Achieving balance in the team can be achieved not only by adopting a new member (new members) with appropriate distribution of personal preference known by the result of the personality test ESTP (extraversion, senses, thinking, perception), but also by the changed leadership approach, which pays more attention to team-weaknesses. In the analyzed case, the alternative possibility of team regeneration might be to appoint a new leader who will symbolize the changed vision and ultimate goals.

Comparing willingness of team members to work together and communicate in the sociometric surveys demonstrated their mutual inseparability. Communication skills belong together with personal sympathy and positive experiences or comments to principal decision-makers in selecting collaborators on a joint assignment.

References


