

TEAM AUTONOMY AN EMERGING CONCEPT IN OCCUPATIONAL AND ORGANIZATIONAL PSYCHOLOGY

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ABSTRACT

The aim of this study was to investigate team autonomy as central set of team-level job resources that encourage team effectiveness. We took a multidimensional perspective on team effectiveness, defining this construct in terms of objectively registered records of team productivity, self-reported team performance, team satisfaction and team viability. The proposed team effectiveness model was examined in a sample of 43 production teams. Teams were composed of 2 to 11 employees. The results showed that team autonomy was not a predictor of the team effectiveness dimensions. The findings of this study could be used to improve future research on team work excellence.

Key words: Team autonomy, team effectiveness, teamwork

Introduction

Companies search for talented employees who easily achieve their performance targets and thereby deliver on time high quality products and services. The business needs teams who are extremely beneficial in the workplace and reach a high level of excellence. As a consequence of spreading the teamwork model in companies all over the world, specialists from various fields started to look for the answer to the most influential question, namely, which factors contribute to or undermine team effectiveness. Hence, the scope of our research is to investigate the factors that predict team effectiveness in production teams.

Team effectiveness

For those organizations that do implement team units, measuring their effectiveness is necessary, yet challenging. Team effectiveness is usually associated with team performance (e.g., quality and quantity) as well as with team members' affective reactions (e.g., satisfaction and viability). Hackman suggested three measures to evaluate team effectiveness: 1) results that meet or exceed standards 2) the willingness and capability of the team to continue working together and 3) team experience that satisfies the personal needs of team members. Cohen, Ledford, and Spreitzer (1996) stated that team effectiveness could be defined as high performance results. Authors as Tannenbaum, Salas, and Cannon-Bowers (1996) determined effectiveness as a combination of team performance results and the team's ability to develop and regenerate itself.

Companies who are likely to build an organizational structure based on working teams, must have an idea of what constitutes team effectiveness. Many formal definitions of team effectiveness exist. We define team effectiveness by capturing 4 dimensions that "represent the criteria to assess the effectiveness of team actions" (Kozlowski & Bell, 2003, p. 346). We view team effectiveness as performance results that meet or exceed both the production targets set by the employer and these set by the team itself. On these grounds we also incorporate the team members' experience (quality of work) that satisfies team needs and team viability seen "in terms of the extent to which individuals wish to remain as members of the team" and have a collective sense of belonging (Mathieu, Maynard, Rapp & Gilson, 2009, p. 418). The relevance of team viability is well explained by Parker and Williams (2001) who noted that a high performing team will not remain successful in the long term if its members are not committed to the team and do not wish to continue working together.

Based on this conceptualization, we propose a comprehensive definition of team work excellence that incorporates team effectiveness in terms of quantity and quality of the work activities by objectively registered records of team productivity, self-reported team performance, team satisfaction with productivity and team viability. On the basis of the evidence currently available, it seems fair to suggest that team effectiveness evaluation must not only capture the final outcome of team performance, but also find if teams feel satisfied with achieved goals and if team members would gladly continue to work as a team. This combined conceptual definition of team effectiveness as a multidimensional construct can help us provide a more complete picture of this complex phenomena.

Team autonomy

Nowadays, investigating autonomous teams has become increasingly important to researchers and practitioners. With the development of team designs that incorporate work autonomy, the importance of understanding the relationship between autonomy and team effectiveness has strongly increased (Langfred, 2000). Hackman (1983) defined autonomy as the freedom and discretion an individual has in work tasks' implementation. Based on this definition, we describe autonomy on the team level as the extent to which the team can take over the execution of its own work. This means that team autonomy gives the team the possibility to be part of the decision-making process in terms of tasks, working methods, organization of working time, task distribution, etc. We assume that team autonomy increases team flexibility and gives the team the possibility to be part of the team-decision making process, which in turn allows the team to respond better to problems and challenges and easily adapt to changing internal and external conditions, hence contributing to team effectiveness. We perceive teams as living systems where team members can to a certain degree organise their work, influence the pace of their activities and prioritise problem solving when it is needed. Giving autonomy to the team could also give better production results because the time for taking a particular decision is faster and production time, unfortunately, is always limited. Moreover, the presence of team autonomy as already said eliminates the need of a team leader to be involved in daily details as members take control of doing what needs to be done. Along these lines, teams may perform better and respectively be proud of the work outcome. Autonomous teams are often a preferable way of work structuring and team functioning because they possess many advantages such as: flexibility, reduced supervision costs, faster production time, creativity, collective decision-making, skills exchange and cohesion among employees which in turn make them beneficial for team effectiveness (Parker & Williams, 2001).

Numerous researchers revealed that autonomy has significant performance benefits (Cohen & Ledford, 1994; Cohen et al., 1996; Cotton, 1993; Macy & Izumi, 1993; Langfred & Moye, 2004). In addition, a considerable number of research studies found out that team autonomy is associated with improved quality of work life (Cohen et al., 1996; Spreitzer et al., 1999), increased work motivation and increased job satisfaction (Janz, 1999; Janz, Colquitt, & Noe, 1997; van Mierlo, Rutte, Kompier, & Doorewaard, 2005). High team autonomy has also been linked to increased productivity and quality of performance (Goodman, Devadas, & Hughson, 1988; Hackman, 1987; Sundstrom, De Meuse, & Futrell, 1990). Some authors stated that the presence of task autonomy leads to higher team performance by increasing a sense of responsibility among team members (Hackman & Oldham, 1975; Spreitzer et al., 1999). A meta-analysis conducted by Stewart (2006) also showed a positive relationship between team autonomy and performance. Langfred and Moye (2004) found out that providing employees with a certain level of control over the assigned work leads to valuable outcomes such as superior motivation, satisfaction, and performance.

Cohen and Ledford (1994) mentioned two important reasons why team autonomy has a positive influence on team effectiveness. Firstly, they said that team members who are part of a self-managing team possess self-regulation over changing conditions and circumstances with which the

team is confronted. In their opinion, autonomous teams encourage self-regulation by means of cognitive and behavioral mechanisms – for example goal setting. Secondly, they explained that the way their work activities are organized, planned and controlled by themselves motivates team members because this type of work design promote high task variety, autonomy, significance and feedback which in turn encourage internal work motivation. This motivation in its turn represents a driver, which lead to beneficial performance and satisfaction outcomes.

These many positive findings notwithstanding, some other researchers found that team autonomy can have adverse effects and less favorable outcomes on team effectiveness (Cohen & Bailey, 1997; Smith and Comer, 1994; Wageman, 1997). All positive effects of team autonomy on team effectiveness are also in contrast with the findings of Langfred (2004; 2007) who showed the downside of the self-autonomous teams. The same author (2007) also included practical implications proving that autonomous teams are not always good at “managing” themselves. Langfred (2007) stated that qualities as flexibility and adaptability, which are associated with self-managing teams could in certain job-related conflict situations limit team members’ capacity and make them dysfunctional. In this case, lower team performance is inevitable. Barker (1993) also suggested that a negative side of autonomy could be observed in self-managing teams. The arising team control in the absence of hierarchical leadership makes autonomous teams to act in the frames of the values, norms and rules they themselves create. In this way, the team becomes the supervisory force that guides its actions. Besides, all these shared values, norms and rules seem to be more rigid than in many other types of teams.

The presented finding are an emerging point to the presence of positive and negative effects of autonomy on team effectiveness, which makes team autonomy construct abroad *area of interest*. All these contradicting outcomes appear to occur in specific situations and under specific circumstances and that, on the whole, the effects of team autonomy seem to be predominantly positive.

In view of all that has been mentioned so far, we assume that team autonomy is a core element associated with team effectiveness. Thus, we predict the following:

Team autonomy is positively related to team effectiveness(in terms of team productivity, self-rated team performance, team satisfaction, and team viability).

MATERIAL AND Method

Participants and Procedure

This study was conducted in an international manufacturing company and more precisely at one of its production departments. The main units of observation were production teams. The examined production department consisted of 43 teams in total. All 43 teams took part in the current study. Teams were composed of 2 to 11 employees.

The teams were working on 3 different shifts that change on a weekly basis according to the production needs. 20 out of all 43 teams were working on the first shift, 18 out of 43 teams on second shift, and the remaining 5 teams on the night shift. 86 % of the participants were female and 14 % male, with age ranging from 19 to 60 years. Employees worked on full-time. Participants differed on their education status.

We used a survey study design with a Stable (i.e. trait) survey that was administered once and a Daily survey that was administered on three consecutive days. The research was conducted in 3 consecutive days. Employees working in teams were asked to fill out two types of paper and pencil questionnaires.

The Daily measures questionnaires used during the all 3 research days included the same items because they aimed to examine the fluctuations in the study variables across the three consecutive working days. The Stable measures questionnaire was developed to measure team

members' perceptions about team resources, team work engagement and team effectiveness in general. Both types of questionnaires were prepared for the purposes of the current study by adapting several scientifically derived and validated instruments of the examined constructs and several self-constructed items.

Instruments

All items were converted into statements in order to avoid misunderstanding and to make it easier to answer them. In this the way participants were presented with a common response scale for all items: 1: I completely disagree; 2: I disagree; 3: I agree nor disagree; 4: I agree; 5: I completely agree. All team members individually filled in all questionnaires. For the purposes of the current study, all items were adjusted from individual to team referent. In the referent-shift model, the basic content of the original constructs remains unchanged but the referent of the content changes from the individual to the team (Chan, 1998; Chen, Bliese & Mathieu, 2005). This is a common technique for measuring group constructs that allows for assessing the agreement among the team members on the team constructs.

Team autonomy

Team autonomy was measured with VBBA, a validated Dutch survey instrument that translates into "Questionnaire on the Experience and Assessment of Work" (Van Veldhoven, De Jonge, Broersen, Kompier, & Meijman, 2002) and more precisely with its adapted referent-shift version by Van Mierlo, Vermunt and Rutte (2009). We selected 7 statements out of the original 11 items. We made this selection to limit the length of the survey and prevent drop-out of respondents due to time issues. The selected 7 items were chosen by a team leader working in the examined research department.

Team effectiveness' dimensions

Team satisfaction

Team satisfaction was measured by a single item that was developed specifically for this study. The item is based on Kozlowski & Bell's (2003) description of team effectiveness. The authors state that team effectiveness captures the following dimensions: 1) Performance results that meet or exceed the production targets set by the team itself and 2) Team members' experience (quality of work) that satisfies team needs. In this study, we included team-satisfaction as both a stable and a daily variable. We therefore developed the following items: "On the whole, our team feels satisfied with its work outcomes" (stable measure) and "Today at work, as a team we felt satisfied with our work outcomes" (daily measure).

Team viability

Team viability was measured by a single item that was developed for the purpose of the study. We only included team viability as stable variable, because it indicates the willingness of the individuals to be part of their team in general. It is a team collective sense of belonging and the extent to which all members desire to continue working together affect their effectiveness as described by Kozlowski and Bell (2003). Based on the above-definition and the assumption we made about the stability of this measure, the item that measured team viability was phrased as: "We would gladly continue to work together as a team".

Self-rated team performance

Team ratings of performance were measured by two items developed specifically for the current study. The self-constructed items were: „Today at work, as a team we delivered work of high quality" and „Today at work, the work we did as a team met high standards". In order to measure

team performance construct on stable level of measurement, items were converted into present tense statements. Cronbach's alpha was .84 for both stable and the average value of the three daily team performance measures.

Team productivity (objective)

One of the main criteria to assess team effectiveness as postulated by Kozlowski and Bell (2003) is performance results that meet or exceed the production targets set by the employer. For that reason, we gathered team performance data from the production itself based on a software instrument used in the manufacturing company.

Results

In the current study we were unable to observe a significant relation between team autonomy and team effectiveness. This means that all qualities that self-managing possess, for example, as having a considerable authority with regard to work methods, planning, decision-making, task distribution, and coordination with other teams (e.g., Cohen & Bailey, 1997; Cummings, 1978; Goodman, Devadas, & Hughson, 1988; Kemp, Wall, Clegg, & Cordery, 1983; Pearson, 1992). As such, our study does not support the common contention that team self-management in terms of, for example, work methods, tasks distribution, organization of working time contributes to team effectiveness. Previous research did suggest that team autonomy may not be equally beneficial in each situation. Langfred (2007), for example, showed that self-managing teams (i.e. teams with high levels of team autonomy) run the risk of restructuring themselves in dysfunctional ways in response to conflict, undermining their performance. In addition, Barker (1993) also described the negative side of autonomy taking into consideration the presence of shared values, norms and rules that seem to be more rigid than in many other types of teams.

Conclusion

The basic premise of the current work is to extend previous research in several ways. Firstly, our study may yield a valuable addition to both literature and practice. Our research will contribute to current insight into this team-level relationship and may yield recommendations for future research that can help develop and advance this important research domain. We also take a multidimensional perspective on team effectiveness, defining and measuring team effectiveness construct in terms of objectively registered records of team productivity, self-reported team performance, team satisfaction with productivity and team viability. The findings of this study could be used to improve future research on team work excellence.

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