OPERATIONAL EFFICIENCY AND INTERACTIVE EFFICIENCY IN THE COMPANY: THE POINT OF VIEW OF WORK AND ORGANIZATIONAL PSYCHOLOGY

Riccardo Sartori, University of Verona Andrea Ceschi, University of Verona Francesco Tommasi, University of Verona

ABSTRACT

The paper deals with the concepts of operational efficiency (good job performance) and interactive efficiency (good organizational climate) in the perspective of organizational coexistence. Operational efficiency is basically a measure of the efficiency of profit earned as a function of operating costs. The greater the operational efficiency, the more profitable a company. Interactive efficiency can be considered a measure of the progress of social relations within a work context, where people find themselves living and working together without having mostly had the possibility of choosing each other (organizational coexistence). As Gozzoli (2016) points out, living together has always been a complex challenge: in organizations people find themselves interacting, developing relationships, producing, and share spaces and time, with no chance to choose each other in most cases. And yet they are asked to cooperate to achieve the organizational goals, that is to say, goals set by the company, not by workers and employees. Against this background, the paper aims to show and reaffirm the concept expressed by Bass (1960) that without interactive efficiency, operational efficiency is less likely to be achieved.

Keywords: Operational Efficiency, Interactive Efficiency, Task Orientation, Relationship Orientation, Organizational Coexistence, Organizational Conflict

INTRODUCTION

Operational Efficiency and Interactive Efficiency in the Perspective of Organizational Coexistence

Organizations are born to achieve goals. To do this, they need people. In order to be hired by an organization, people are recruited, assessed, selected, assigned roles, and put to work together even if they do not know each other. In this way, once they are hired, people become workers and employees, basically workforce, or, if you prefer, human resources with a specific role in the organization, a role being the collection of behavioral expectations that accompany a particular job position (Ceschi et al., 2017a).

Therefore, from the point of view of work and organizational psychology, companies, businesses, firms and enterprises, in one word organizations, are places inhabited by individuals and groups who find themselves working side by side without having chosen each other (Tomietto et al., 2015). They have been chosen by someone else, typically the organization itself through some method of personnel selection aimed at assessing mainly their skills, not their personal characteristics (Sartori & Ceschi, 2013; Sartori et al., 2016, 2017). As a result, people might not get along at a personal level. Nevertheless, based on the role they have in the organization, they are asked to collaborate anyway. This working-side-by-side phenomenon involving different people who have not chosen whom to work with is referred to as organizational coexistence (Bulc, 2012).

The concept of organizational coexistence indicates the coexistence, in organizations, of roles and people who find themselves having to interact and hopefully collaborate to achieve organizational goals (Ceschi et al., 2017b). These goals usually pre-exist the hiring of people, are established by organizations and do not reflect the personal needs and desires of workers and employees, who, in fact, from an organizational point of view, are supposed to behave more based on their roles and less as people as such, while, from an individual point of view, the so-called human resources may go to work also to satisfy their own personal needs and desires (Hare, 2003). This possible discrepancy between organizational goals on the one hand, and personal needs and desires on the other can be a first potentially conflicting element in organizations.

Furthermore, the concept of organizational coexistence embodies the possibility, for roles and people living together in organizations, to collaborate as well as to conflict; and this aspect is relevant from the point of view both of operational efficiency, *i.e.*, the ability to carry out tasks and achieve goals respecting methods, times and costs (good job performance), and of interactive efficiency, *i.e.*, the ability to meet the personal needs and desires of the members of the organization and to motivate their behavior (good organizational climate) (Salas et al., 2014).

The concepts of operational efficiency and interactive efficiency have been combined following observations made on working groups which have shown that operational efficiency is unlikely without interactive efficiency (Bass, 1960). Furthermore, they can be associated with the concepts of task orientation and relationship orientation, whereby exclusively task-oriented leaders and groups would mostly aim for operational efficiency, even at the expense of interpersonal relationships, while relationship-oriented leaders and groups would have a greater focus on climate aspects (Marinova et al., 2019), without neglecting the achievement of goals (McGregor, 1960).

Indeed, goal and organizational coexistence, role and person, operational efficiency and interactive efficiency, task orientation and relationship orientation are the two sides of that same coin that we call organization (and company, and firm, and enterprise, etc.). Table 1 shows two different columns (GOAL *vs* ORGANIZATIONAL COEXISTENCE) and three different rows that contrast/combine the concepts of role and person, operational efficiency and interactive efficiency, task orientation and relationship orientation in organizations (Sartori et al., 2018).

Table 1 THE TWO SIDES OF ORGANIZATIONS: GOAL (WITH ROLE, OPERATIONAL EFFICIENCY, AND TASK ORIENTATION) AND ORGANIZATIONAL COEXISTENCE (WITH PERSON, INTERACTIVE	
EFFICIENCY, AND RELATIONSHIP ORIENTATION) GOAL ORGANIZATIONAL COEXISTENCE	
(Organizations are born to achieve goals)	(Organizations need people)
ROLE	PERSON
(Collection of behavioral expectations)	(Collection of individual characteristics)
OPERATIONAL EFFICIENCY	INTERACTIVE EFFICIENCY
(Good job performance/	(Good organizational climate/
Measure of the efficiency of profit)	Measure of the progress of social relations)
TASK ORIENTATION	RELATIONSHIP ORIENTATION
(Focus on achieving goals)	(Focus on people's needs and desires)

In organizations, where people find themselves working side by side with other people they did not have the possibility to choose, interactive efficiency drives operational efficiency. As a demonstration of this, we cite here the meta-analysis by Hülsheger, et al., (2009) on the topic of team-level antecedents of job performance in terms of creativity and innovation. Results revealed that such variables as support for innovation, vision, balance between task orientation and relationship orientation, and communication displayed the strongest correlations (r) with job performance (r values between 0.40 and 0.50, p<0.01), while such variables as team composition and structure showed weaker effect sizes (Burro et al., 2011).

Similarly, an article published by Ceschi, et al., (2014) presents the results of a longitudinal study conducted during 4 months with 183 Italian participants, divided into n=50 teams of three (n=24), four (n=19) and five (n=7) members. Participants were involved in a business game in which the aim was not only to earn virtual money, but also to learn long-term strategies to develop profitable investments without losing sight of economic factors. The study investigated the communication and innovation (CI) dimension drawn from the Italian version of the Team Climate Inventory (TCI) by Ragazzoni, et al., (2002). An *r* value of 0.301 (p<0.5) between team performance and CI was found, while, again, such variables as team composition and structure showed weaker effect sizes (Burro et al., 2011).

Finally, a study by Loewen & Loo (2004) shows that the concept of internal communication measured by the TCI is in relation to group climate, organizational learning, and, most importantly for our topic, group performance.

Individuals and Groups, Their Needs and Desires

In work and organizational psychology, when we talk about groups, we do not mean only the groups of physically co-present people who form departments and offices, but also the groups with which each of us psychologically identifies, such as the group of managers (those who lead) versus the group of operational staff (those who do); the White (or EU) group versus the Black (or non-EU) group; the group of males versus that of females. These are called *social groups* and, when even only two people interact on the basis of their respective group identifications, this gives rise to the so-called *intergroup relations*, which concern the perceptions, attitudes, and behaviors people express when they think of themselves and others as members of social groups (Tajfel, 1982).

Also this aspect, not only the inevitable and physiological individual differences, contributes to the potential for conflict inherent in the concept of organizational coexistence. The practice of human resource management that considers the different diversities present in the company and tries to create an inclusive environment for each and everyone is called *diversity management* (Sartori et al., 2020). More specifically, diversity management is the deliberate effort made by the leaders of an organization to hire diverse talents, manage them, and support an inclusive workplace that values and protects each of its workers and employees equally by providing resources to learn from, connect with and respect individual differences (Hayes et al., 2020).

Individuals and groups, as Mayo (1933, 1945) pointed out long ago, go to work with the expectation of satisfying their own needs and desires, both personal and relational, such as those that Maslow (1954) grouped into five hierarchical categories according to the so-called actualizing tendency of Rogers (1951): physiological, safety, belonging, esteem and self-actualization needs.

If we now consider that the needs and desires that individuals try to satisfy at work are not the same for everyone, and that groups, according to Tajfel's lesson (1982), tend to give rise to dynamics of mutual support within them (*ingroup*) and of distance or even hostility towards groups that are other than themselves (*outgroup*), it becomes easy to understand how diversity management can be challenging, how many forms the relationships between people at work can take, and how these can go in the direction of increasing or decreasing both interactive efficiency and operational efficiency.

In all this, the perceptions that individuals have of themselves, others and the surrounding environment play a role, as well as the attitudes assumed as a result of these perceptions. The following story, attributed to Peter Shultz, the inventor of optical fibers, exemplifies it:

Three people were at work on a construction site. All were doing the same job, but when each was asked what the job was, the answers varied.

- Breaking rocks, the first replied.
- Earning my living, the second said.
- Helping to build a Cathedral, said the third.

The first answer is limited to referring to duties and role behaviors (Breaking rocks).

The second one emphasizes the instrumental aspect of the job, of every job, not of this specific one, namely the fact that, by working, one earns a living. This second worker seems to be motivated mainly by physiological needs, and shows little organizational attachment, which is an affective bond, lasting and stable, which has a positive impact on one's sense of identity and translates into a search for psychological closeness with the object of attachment (work, organization, colleagues, etc.) (Feeney et al., 2020). Not having developed a particular attachment bond with his organization, and being motivated mainly by physiological needs, we can easily imagine that this worker, should he find a better place to earn a living, will leave without a second thought, creating an operational efficiency problem for the company.

Indeed, from an organizational point of view, losing personnel means losing competencies, which need to be replaced through assessment, selection, training, and development processes that are often challenging and expensive (Sartori et al., 2018, 2020). For these reasons, employee turnover, defined as the rate at which workers and employees leave a company and are replaced by new ones, is a variable that organizations should keep under control. Accordingly, much research has been conducted to investigate the relationship between turnover intention, *i.e.*, workers and employees' plans to leave their positions, and classic organizational variables, such as job satisfaction (Tett & Meyer, 1993), job performance (Tomietto et al., 2015), leader-member exchange (Harris et al., 2005), emotional intelligence (Brunetto et al., 2012), organizational commitment (Saeed et al., 2014), but also perceived organizational support which refers to employees' beliefs and perceptions concerning the extent to which the organization values their contribution, cares about their well-being, and fulfils their personal and relational needs and desires (Costantini et al., 2018).

Only the third answer specifically refers to the collaboration between people at work (Helping), and that only thanks to this collaboration (interactive efficiency) it becomes possible to give life to something great (the Cathedral) that otherwise, alone, no one could achieve (operational efficiency). Unlike the previous worker, this worker seems proud to work for the company, happy to contribute and satisfied to be able to create something together with the others.

The story contains a message aimed at both individuals and organizations. The former should reflect on their attitude at work and ask themselves how they live their job. Organizations, on the other hand, or rather those who have the responsibility of a company or a business, such as entrepreneurs and managers (Ceschi et al., 2017; Sartori et al., 2014), should grasp the message that, given the concept of organizational coexistence from which this article has started, it is necessary to invest in the so-called human resources, for example in training and team building actions (Costantini & Sartori, 2018), so that people at work develop the collaborative and participatory attitude exemplified by the third answer of the story.

Indeed, organizations cannot assume that their members already know how to collaborate on the basis that they have hired adults, because, in addition of being adults, the so-called human resources are also different in many ways, from gender, to geographic origin, background, needs, desires, etc. For example, globalization processes and the increase of migrating phenomena have led to a cultural diversity that has become more and more evident also in the workplace, where it needs to be appropriately managed if the aim is to create such an inclusive environment and such a positive organizational coexistence that interactive efficiency drives operational efficiency (Gozzoli, 2016).

Although collaboration between human resources is a classic theme, research continues to address it, also considering the new forms of remote and smart working. For example, a very recent study published online on the Journal of Occupational and Organizational Psychology (Downes et al., 2021) reaffirms the key role that collaboration has on job performance, both

positively (when it exists, interactive efficiency) and negatively (when it is affected by conflicts, interactive inefficiency). Another very recent study published online (Khasraghi & Hirschheim, 2021) suggests that collaboration positively affect team performance even in crowdsourcing contests. Finally, a study published in 2010 (Thompson & Ku, 2010) exploring the relationship between online collaboration and team performance is on the same wavelength and goes in the same direction.

Task Orientation and Relationship Orientation and their Links to Operational Efficiency and Interactive Efficiency

As we have already mentioned, operational efficiency can be assimilated to task orientation, while interactive efficiency can be compared to relationship orientation. Just as operational efficiency benefits from interactive efficiency, so task orientation gives better results when balanced with an appropriate relationship orientation.

The story we report in this paragraph exemplifies very well the relationships between task orientation and relationship orientation on the one hand, and operational efficiency and interactive efficiency on the other. It is taken from the classic book by Paul Watzlawick titled Instructions To Make Yourself Unhappy and is the story of a double failure: the one linked to operational efficiency, that is to say, the carrying out of tasks and the achievement of goals, and the one linked to interactive efficiency, that is to say, the development of positive and functional relationships with others:

A man wants to hang a painting. He has the nail, but not the hammer. Therefore, it occurs to him to go over to the neighbor and ask him to lend him his hammer. But at this point, doubt sets in. What if he doesn't want to lend me the hammer? Yesterday he barely spoke to me. Maybe he was in a hurry. or, perhaps, he holds something against me. But why? I didn't do anything to him. If he would ask me to lend him something, I would, at once. How can he refuse to lend me his hammer? People like him make other people's life miserable. Worst, he thinks that I need him because he has a hammer. This has got to stop! And suddenly the guy runs to the neighbor's door, rings, and before letting him say anything, he screams: "You can keep your hammer, you bastard!"

In the story, hanging the painting represents the task to be done, while the missing hammer represents the problem to be solved in order to achieve the goal.

With respect to this problem, the protagonist identifies a relational solution: to borrow the neighbor's hammer. The neighbor may very well be a colleague – just set the story in organizations.

Up to this point, the protagonist of the story proves to be oriented both to the task (hanging the painting) and to the relationship (asking for help from the neighbor).

If after the third sentence the protagonist had left the house, had rang the bell of the neighbor and had asked him to borrow the hammer, everything that follows would not be there: the protagonist would have simply asked for what he needs and would have exposed himself to the possibility of both a positive and a negative answer, as normally should happen.

But things go differently. The protagonist gets caught up in a series of doubts that lead him first to conduct a reasoning that is not a reasoning (given the cognitive biases and narrative fallacies present in it, Ceschi et al., 2019) and then to fail the goal (*operational inefficiency*: the protagonist does not even gets to ask for the hammer, let alone to get it!) and to compromise the relationship with the neighbor/colleague (*interactive inefficiency*: in his mental ruminations, the protagonist gets so angry with his neighbor that he verbally assaults him, intimating him to keep what he needs instead of simply asking for it).

It seems that the protagonist has refused what he needs before receiving a refusal, and perhaps for fear of it, but above all, for the economy of our speeches, during his mental ruminations the protagonist loses sight of the task to be performed and the goal to be achieved, becoming less and less task oriented. At the same time, by feeding negative emotions through the representation of the neighbor as an unavailable person, he relates to the neighbor only to reject what he needs and verbally assault him as if the neighbor had really and already refused him the favor. Thus, the relationship orientation also gets lost during his mental ruminations.

Beyond caricature and exaggeration, the story is a refined example of how interactive efficiency connects to operational efficiency and how, consequently, interactive inefficiency leads to operational inefficiency. But be careful there: those who have the responsibility of an organization should question which organizational and environmental factors (for example climate and culture) relating to their company can make it more likely that dysfunctional relationships of this type will be established among their human resources, rather than simply attributing facts of this type to the undesirable personal characteristics of individuals. Organizational coexistence is primarily the responsibility of the organization, not of individuals.

CONCLUSIONS

As we have seen throughout the article, operational efficiency in the company depends on interactive efficiency, and this is characterized by collaborative and non-conflictual relationships between the so-called human resources, whose needs and desires are as well satisfied in the workplace and not only those of the company.

To avoid considering any conflict as negative, literature in work and organizational psychology distinguishes two types of organizational conflict: physiological conflict and pathological conflict (De Dreu, 2005) (Table 2).

Table 2 CHARACTERISTICS OF PHYSIOLOGICAL CONFLICT AND PATHOLOGICAL CONFLICT	
Physiological conflict	Pathological conflict
Task oriented	Relationship oriented
Productive	Destructive
Leads to the improvement of processes and innovation	Leads to the wearing down of interpersonal and role
(operational efficiency)	relationships (interactive inefficacy).

Two people find themselves involved in what has been called physiological conflict when their differences of opinion concern how they perform tasks and achieve goals. Basically, physiological conflict is task oriented.

Although the attitude of being too task-oriented is generally viewed as negative and refers to people, particularly leaders, who neglect the relationship aspects with their collaborators, remaining task-oriented in the case of physiological conflict is positive. This type of conflict is easily resolved when, from the dynamic of confrontation between the two parties, an idea emerges that both can consider acceptable or even the best on how to carry out tasks and achieve goals. Indeed, to the best of its possibilities, physiological conflict leads to the improvement of organizational processes and contributes to innovation (Sartori et al., 2013, 2018). Physiological conflict is productive.

Conversely, two people find themselves involved in what has been called pathological conflict when the focus is no longer the performance of tasks and the achievement of goals but the destruction of others (their annihilation, humiliation, etc.). Basically, pathological conflict is relationship oriented.

As you can see, although the expression relationship orientation usually refers to a positive attitude, being relationship oriented in the case of pathological conflict means becoming destructive towards others, and completely losing sight of tasks and goals. As in the case of mobbing, just to give the most striking example. Or in the case of the protagonist of the second story reported in this article, where his aim becomes to teach the neighbor a lesson. Pathological conflict is indeed destructive.

In the reality of organizations, conflicts tend to present a mix of the characteristics indicated in Table 2. This distinction serves as a reminder that operational efficiency benefits from interactive efficiency, but only when the mix between task orientation and relationship orientation is appropriately balanced and distributed in organizations.

Entrepreneurship and Economics

REFERENCES

Bass, B.M. (1960). Leadership, psychology, and organizational behavior. New York: Harper.

- Brunetto, Y., Teo, S.T.T., Shacklock, K., & Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, wellbeing and engagement: Explaining organizational commitment and turnover intentions in policing. *Human Resource Management Journal*, 22, 428-441.
- Bulc, V. (2012). New organizational and social paradigm: From cooperation to co-creation and sustainable coexistence. *Journal of Organisational Transformation & Social Change*, 9, 29-39.
- Burro, R., Sartori, R., & Vidotto, G. (2011). The method of constant stimuli with three rating categories and the use of Rasch models. *Quality and Quantity*, 45, 43-58.
- Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A. (2019). Dimensions of decision-making: An evidence-based classification of heuristics and biases. *Personality and Individual Differences*, 146, 188-200.
- Ceschi, A., Costantini, A., Dickert, S., & Sartori, R. (2017b). The impact of occupational rewards on risk taking among managers. *Journal of Personnel Psychology*, *16*, 104-111.
- Ceschi, A., Costantini, A., Phillips, S.D., & Sartori, R. (2017a). The career decision-making competence: A new construct for the career realm. *European Journal of Training and Development*, 41, 8-27.
- Ceschi, A., Dorofeeva, K., & Sartori, R. (2014). Studying teamwork and team climate by using a business simulation. How communication and innovation can improve group learning and decision-making performance. *European Journal of Training and Development*, *38*, 211-230.
- Costantini, A., & Sartori, R. (2018). The intertwined relationship between job crafting, work-related positive emotions, and work engagement. Evidence from a positive psychology intervention study. *Open Psychology Journal*, 11, 210-221.
- Costantini, A., Dickert, S., Ceschi, A., & Sartori, R. (2018). Psychological processes underlying organizational reward management: The role of perceived organizational support and effort-reward management. *In The Routledge Companion to Reward Management*. Routledge: London, 25-33.
- De Dreu, C.K.W. (2005). Conflict in organizations: Beyond effectiveness and performance. *European Journal of Work and Organizational Psychology*, 14, 105-117.
- Downes, P.E., Gonzalez-Mulé, E., Seong, J.Y., & Park, W.W. (2021). To collaborate or not? The moderating effects of team conflict on performance-prove goal orientation, collaboration, and team performance. *Journal of Occupational and Organizational Psychology*, online.
- Feeney, J.R., Gellatly, I.R., Goffin, R.D., & Inness, M. (2020). Organizational attachment. Journal of Personnel Psychology, 19, 113-124.
- Gozzoli, C. (2016). Living and working together in organizations: Theme relevance An introduction. World Futures. The Journal of New Paradigm Research, 72, 219-221.
- Hare, A.P. (2003). Roles, relationships, and groups in organizations: Some conclusions and recommendations. Small Group Research, 34, 123-154.
- Harris, K.J., Kacmar, K.M., & Witt, L.A. (2005). An examination of the curvilinear relationship between leadermember exchange and intent to turnover. *Journal of Organizational Behavior*, 26, 363-378.
- Hayes, T.L., Oltman, K.A., Kaylor, L.E., & Belgudri, A. (2020). How leaders can become more committed to diversity management. *Consulting Psychology Journal: Practice and Research*, 72, 247-262.
- Hülsheger, U.R., Anderson, N., & Salgado, J.F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94, 1128-1145.
- Khasraghi, H.J., & Hirschheim, R. (2021). Collaboration in crowdsourcing contests: how different levels of collaboration affect team performance. *Behaviour & Information Technology*, online.
- Loewen, P., & Loo, R. (2004). Assessing team climate by qualitative and quantitative approaches: Building the learning organization. *Learning Organization*, *11*, 260-272.
- Marinova, S.V., Cao, X., & Park, H. (2019). Constructive organizational values climate and organizational citizenship behaviors: A configurational view. *Journal of Management*, 45, 2045-2071.
- Maslow, A.H. (1954). Motivation and personality. New York: Harper.
- Mayo E. (1945). *The social problems of an industrial civilization*. Boston: Graduate School of Business Administration, Harvard University.
- Mayo, E. (1933). The human problems of an industrial civilization. New York: Macmillan.
- McGregor, D. (1960). The human side of enterprise. New York: McGraw-Hill.
- Ragazzoni, P., Baiardi, P., Zotti, A.M., Anderson, N., & West, M. (2002). Italian validation of the team climate inventory: A measure of team climate for innovation. *Journal of Managerial Psychology*, *17*, 325-336.
- Rogers, C.R. (1951). Client-Centered Therapy. Boston: Houghton-Mifflin.
- Saeed, I., Waseem, M., Sikander, S., & Rizwan, M. (2014). The relationship of turnover intention with job satisfaction, job performance, leader member exchange, emotional intelligence, and organizational commitment. *International Journal of Learning and Development*, *4*, 242-256.

- Salas, E., Salazar, M.R., Feitosa, J., & Kramer, W.S. (2014). Collaboration and conflict in work teams. In B. Schneider & K. M. Barbera (Eds.), *The Oxford handbook of organizational climate and culture*. Oxford University Press. 382–399.
- Sartori, R., & Ceschi, A. (2013). Assessment and development centers: Judgment biases and risks of using idiographic and nomothetic approaches to collecting information on people to be evaluated and trained in organizations. *Quality and Quantity*, 47, 3277-3288.
- Sartori, R., Ceschi, A., & Scalco, A. (2014). Differences between entrepreneurs and managers in large organizations: An implementation of a theoretical multi-agent model on overconfidence results. Advances in Intelligent Systems and Computing, 290, 79-83.
- Sartori, R., Ceschi, A., Costantini, A., & Scalco, A. (2016). Big five for work and organizations: FLORA (Role Related Personal Profile), an Italian personality test based on the Five-Factor Model and developed for the assessment of candidates and employees. *Quality and Quantity*, 50, 2055-2071.
- Sartori, R., Costantini A., & Ceschi A. (2020). Psychological assessment in human resource management: discrepancies between theory and practice and two examples of integration, *Personnel Review*, in press.
- Sartori, R., Costantini, A., Ceschi, A., & Scalco, A. (2017). Not only correlations: A different approach for investigating the relationship between the big five personality traits and job performance based on workers and employees' perception. *Quality and Quantity*, 51, 2507-2519.
- Sartori, R., Costantini, A., Ceschi, A., & Tommasi, F. (2018). How do you manage change in organizations? Training, development, innovation, and their relationships. *Frontiers in Psychology*, *9*, 313.
- Sartori, R., Favretto, G., & Ceschi, A. (2013). The relationships between innovation and human and psychological capital in organizations: A review. *The Innovation Journal*, 18.
- Tajfel, H. (1982). Social identity and intergroup relations. Cambridge, England: Cambridge University Press.
- Tett, R.P., & Meyer, J.P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel Psychology*, *46*, 259-293.
- Thompson, L., & Ku, H.Y. (2010). Degree of online collaboration and team performance. A case study. *The Quarterly Review of Distance Education*, *11*, 127-134.
- Tomietto, M., Rappagliosi, C.M., Sartori, R., & Battistelli, A. (2015). Newcomer nurses' organisational socialisation and turnover intention during the first 2 years of employment. *Journal of Nursing Management*, 23, 851-858.