

Performance Management Practices and Coaching Projects: A Survey

Frida Betto* and Patrizia Garengo

Department of Industrial Engineering, University of Padua, Padua, Italy

Email: frida.betto@unipd.it (F.B.); patrizia.garengo@unipd.it (P.G.)

*Corresponding author

Abstract—In the last few years the business environment has become even more challenging for organizations. Industry 4.0, crisis, and the competitiveness of markets stimulate scholars and practitioners to investigate deeply how to improve and sustain performance. Under this current scenario research on Performance Measurement and Management (PMM) practices has rapidly increased. Notwithstanding the role of coaching within organizations, no study investigates empirically its effects on PMM practices. Our investigation, by a survey of a large sample of coaches, shed light on the key PMM practices enhanced by coaching in order to achieve sustained performance over time.

Keywords—performance measurement, performance management, coaching, organizational performance, questionnaire

I. INTRODUCTION

In the last twenty years coaching has been studied as a tool for supporting employees' competencies and performance (Coimbra and Proença, 2022), Whitmore (2002) as well as facilitating change within organizations (Baron and Morin, 2009). Notwithstanding the research interest towards coaching as an effective tool to improve management practices is rapidly growing, scholars are already investigating to what extent coaching effectiveness affects organizational performance (Coimbra and Proença, 2022; Walker-Fraser, 2011). On the one hand, some scholars tried to link coaching to financial indicators, such as the Return on Investments (ROI) (Boysen, Cherry, Amerie, & Takagawa; Phillips, 2007); on the other hand, others studied the relationship between coaching and management practices such as job satisfaction, motivation, self-efficacy, and learning (Spreitzer, Porath, & Gibson, 2012), or delegation, engagement and communication (Dagley, 2010). However, the role of coaching in improving organizational performance is not still clear (Ribeiro, Nguyen, Duarte, de Oliveira, & Faustino, 2009). First, the role of coaching in improving ROI can not be isolated by other variables, such as market context, team input or opportunity costs, that affect financial performance within organizations (Grant, 2012). Second, how coaching

relates to managerial practices and organizational performance is an underdeveloped topic.

Despite the lack of clarity between coaching and performance, there is a blooming trend in the performance measurement and management field to investigate managerial practices to face the current challenging business environment (Nudurupati, Garengo, & Bititci, 2021; Trotta and Garengo, 2019). In the last ten years, indeed, Industry 4.0 (I4.0), has challenged most business sectors moving from manufacturing and production systems to agriculture and the food industry. Accompanied by the introduction of new technologies such as Big Data and Artificial Intelligence, Industry 4.0 led organizations and academia to question whether their managerial practices are enough effective to implement digitalization (Garengo, Bititci, & Bourne, 2022; Naeem and Garengo, 2022). In line with Trotta and Garengo (2019) "knowledge workers, indeed, are motivated by a sense of purpose, autonomy and mastery", thus, performance management practices such as empowerment, engagement, and team effectiveness should be developed to improve performance (Garengo, Biazzo, Simonetti, & Bernardi, 2005).

In this current scenario, over the years performance measurement field has evolved through to performance management (Bititci, Garengo, Dürfler, & Nudurupati, 2012; Melnyk, Bititci, Platts, Tobias, & Andersen, 2014), i.e. how measures are used to lead organizations to achieve and sustain performance (Bititci, 2015). As a consequence, several scholars have started to focus on performance measurement and management practices (Bititci *et al.*, 2011; Garengo and Betto, 2022; Nudurupati *et al.*, 2021; Pavlov, Mura, Franco-Santos, & Bourne, 2017).

Adopting a balanced perspective, organizations need to design, implement, use and review a set of strategic performance measures to drive organizations (Melnyk *et al.*, 2014; Neely, Gregory, & Platts, 1995) as well as need to develop a set of managerial practices that allows the effective development of performance measurement systems (Bititci, 2015; Garengo and Betto, 2022; Smith and Bititci, 2017).

As recently highlighted by Betto and Garengo (2022), coaching could be a useful tool to develop performance

measurement and management practices, such as setting goals, defining roles and tasks, or developing effective communication strategies. However, no study investigates empirically the potential influence of coaching on the PMM practices. To contribute to this research gap, the paper investigates how PMM practices are affected by coaching in organizations.

The paper is structured as follows. Section II introduces the adopted research framework to investigate the impact of coaching on performance measurement and management. Section III details the research methodology.

Section IV summarizes and discusses the main findings. Section V collects the main conclusions and the research limitations of the paper.

II. RESEARCH BACKGROUND

In the last few years, the competitive and challenging environment is pushing organizations to achieve every day higher levels of performance. Thus, new trends emerged in performance measurement and management literature (Nudurupati *et al.*, 2021).

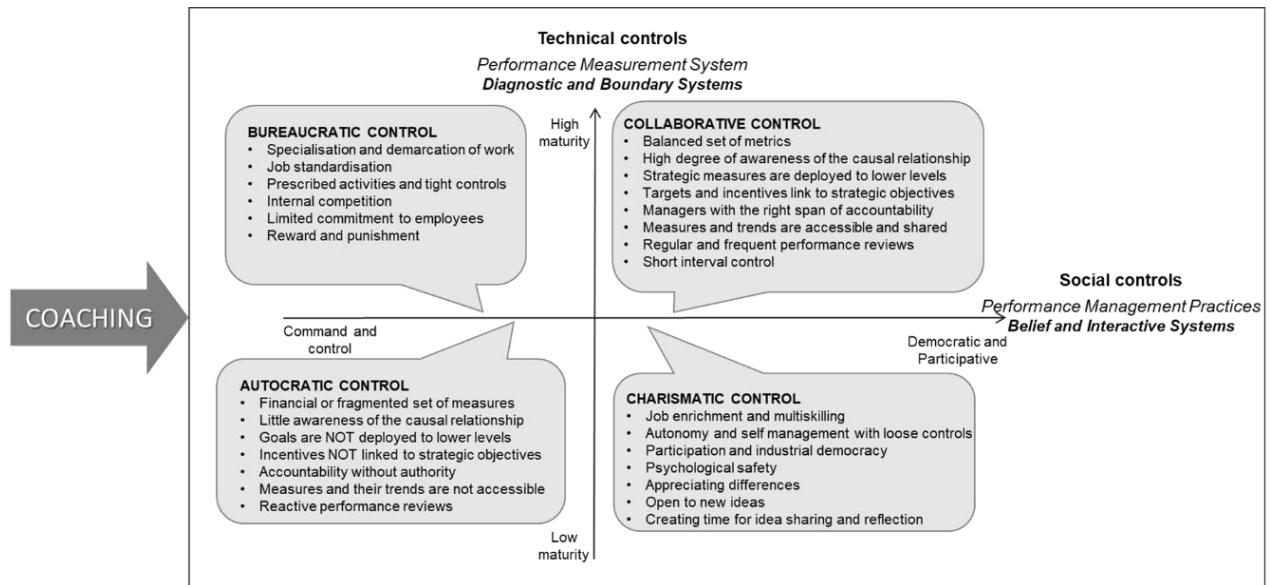


Fig. 1. Research framework adapted from Smith and Bititci (2017).

As Nudurupati *et al.* (2021) revealed, PMM is evolving to cope with emergent trends, by adopting a participative approach which favours engagement, communication, etc. within organizations. In line with Smith and Bititci (2017), the PMM literature is evolving from a deep focus on performance measures to a balanced approach which considers both performance measurement and performance management. The two dimensions, i.e. performance measurement and performance management, have a theoretical foundation rooted in the management control theory (Simon, 1995) and refer to the technical and social dimensions of control (Simon, 1995; Smith and Bititci, 2017; Tessier and Otley, 2012). As shown in Fig. 1, there are several typologies of control, however, organizations need to move towards a high maturity of technical and social control to achieve a sustained level of performance, i.e. collaborative control (Garengo, Sardi, & Nudurupati, 2021; Smith and Bititci, 2017).

To ensure a high level of democracy and participation within organizations, for years, scholars have studied management practices such as goal deployment, communications, leadership role models (Bourne, Pavlov, Franco-Santos, Lucianetti, & Mura, 2013), feedback, and training (Bititci *et al.*, 2011). Among them, Ates, Garengo, Cocca, & Bititci (2016) recognized coaching as a practice to invest in for developing performance management.

In line with the recent literature review of Betto and Garengo (2022), the study has adapted the theoretical framework of Smith and Bititci (2017), assuming that coaching positively affects PMM. The theoretical framework is shown in Fig. 1.

III. RESEARCH METHODOLOGY

To investigate the key PMM practices enhanced by coaching, the research team designed a questionnaire, which collects the following information:

- Company's profile;
- Coaching project characteristics (e.g., type of coaching – internal/external, executive/business, etc.);
- How each PMM practice was enhanced by the project with a 10-point Likert scale. The PMM practices, collected through the literature review, to be evaluated are empowerment, teamworking, internal communication, motivation, employees satisfaction, the definition of objectives, sharing ideas, autonomy, the definition of roles, enhancing diversity commitment, clan organizational culture career development, job enrichment, learning, meritocracy, provision of feedback.

To collect useful data, the research team asked coaches to provide us with coaching projects that achieve

exceptional performance in terms of satisfaction of the commissioner, impact on financial indicators (if possible), and impact on managerial practices consistent with the project's goals.

To reach a numerous sample of coaches, the research team have been supported in two phases by the Italian Association of Professional Coaches (AICP) that funded this project. First of all, they participated by testing the questionnaire before sending it to all the respondents. Second, they supported us to deliver the questionnaire to all the associates (more than 700 coaches).

The data collection period lasted from January to April 2022, the questionnaires were delivered online by using Google Form.

The gathered data were deeply analysed by the research group to understand the key PMM practices empowered by coaching according to the coach's perspective.

The mean value given to each PMM practice has been calculated to find out those most empowered by coaching. The mean value has been calculated on the whole number of cases (also to the ones that give a score to that specific practice), thus, the denominator was fixed (i.e. the total number of signalled cases):

$$Practice_n = \frac{\sum_1^k practice_n}{\sum_1^k signalled\ cases} \quad (1)$$

where k is the total number of cases signalled by coaches and n is the number of PMM practices. The following section reveals the main findings of our study.

IV. FINDINGS AND DISCUSSION

Data analysis provides information on the characteristics of selected coaching projects and the key PMM practices empowered by coaching projects.

Regarding the characteristics of coaching, the data collected through questionnaires shows that the majority of successful coaching projects have been carried out by an external coach (84%), whilst the internal coach, such as a manager of a company, are only a few (16%), as Fig. 2 depicts.

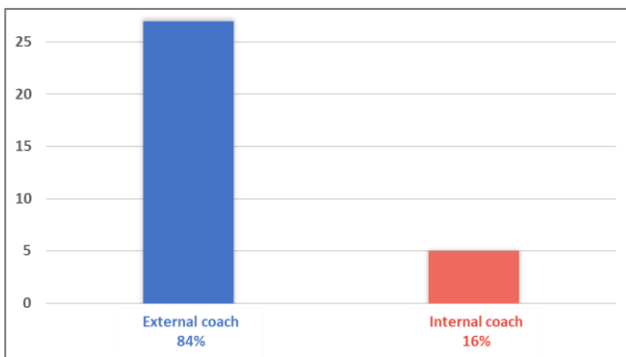


Fig. 2. The typologies of the coach.

Moreover, as Fig. 3 shows, it is noteworthy that the coaches do not apply any specific or prevalent typology of coaching projects such as career coaching (9%) or executive coaching (12%), but they adopt mixed approaches.

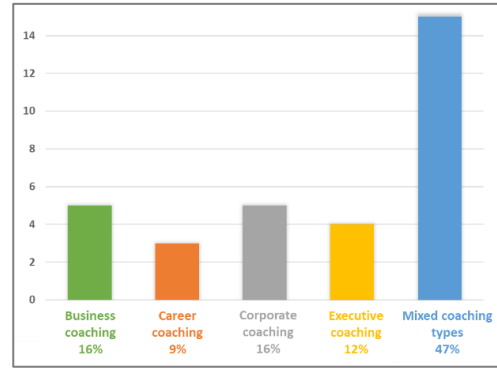


Fig. 3. The typologies of coaching projects.

Besides that, the manner of leading coaching sessions shows a distinct prevalence in individual sessions (50%), while the group sessions are carried out in 28% of the projects and the mixed approaches are developed only in 22% of selected cases (see Fig. 4).

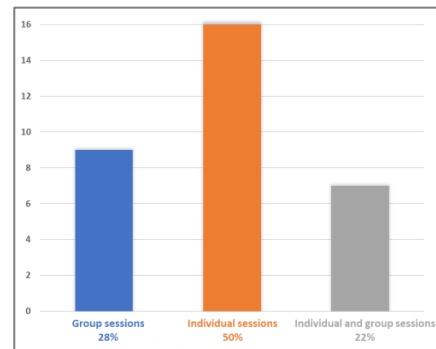


Fig. 4. The typologies of coaching sessions.

The majority of the selected cases (78%) belong to the service sector (insurance activities, public sector, gas and electricity sector, healthcare sector, etc.), while only 16% belong to the manufacturing sector and 6% to the construction and agriculture sectors.

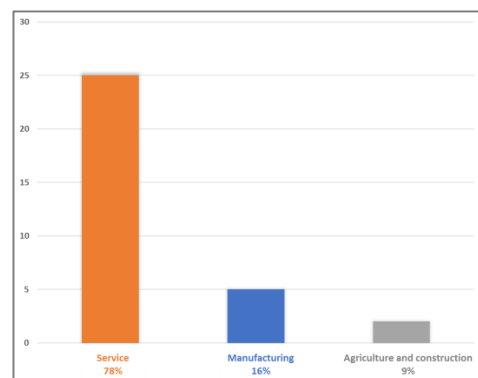


Fig. 5. The profile of companies.

Although service organizations are prevalent (see Fig. 5), the analysis of the collected data points out that the success of a project is not related to a specific typology of coaching project or coaching session.

Regarding the main PMM practices empowered by coaching projects, the research team calculated the mean

values of each PMM practice assigned by coaches with the questionnaire, as described in the previous section. Using these means the PMM practices were hierarchically ordered as shown in Fig. 6 below.

As Fig. 6 shown, coaching has the highest impact on “empowerment” (see the highest bar with 7,72 value), whilst the lowest on “provision of feedback” (see the lowest bar with 3,38 value). Empowerment, teamworking and internal communication represent the first three PMM practices enhanced by coaching projects.

First, the practice of empowering employees developed after coaching projects makes people aware of their potential and their talents. Moreover, the feeling of empowerment related to teamworking is positively associated with a better balance between productivity, quality and customer service (Smith and Bititci, 2017), and with successful teams (Scott and Tiessen, 1999). Another effect of empowerment, stressed by Hamel (2009), is the increasing self-management and autonomy of

empowered employees. Having empowered people means that in the organization people are less controlled (Smith and Bititci, 2017), at the same time, informed about the effectiveness of their actions (Conger and Kanungo, 1988). In the same way, studies on coaching focus on the key role of coaching in empowering employees for career development or to participate actively and contribute productively (Evered and Selman, 1989).

Second, “teamworking”, i.e. the capacity to manage relationships with colleagues in terms of communication, listening, etc. to achieve common goals through inputs and activities carried out together by team members (Marks, Mathieu, & Zaccaro, 2001), the coaches identified it as the second most empowered PMM practice by coaching. Working in teams is positively related to other PMM practices such as information sharing (Scott and Tiessen, 1999), and produces outcomes determined by common and shared objectives (Marks *et al.*, 2001).

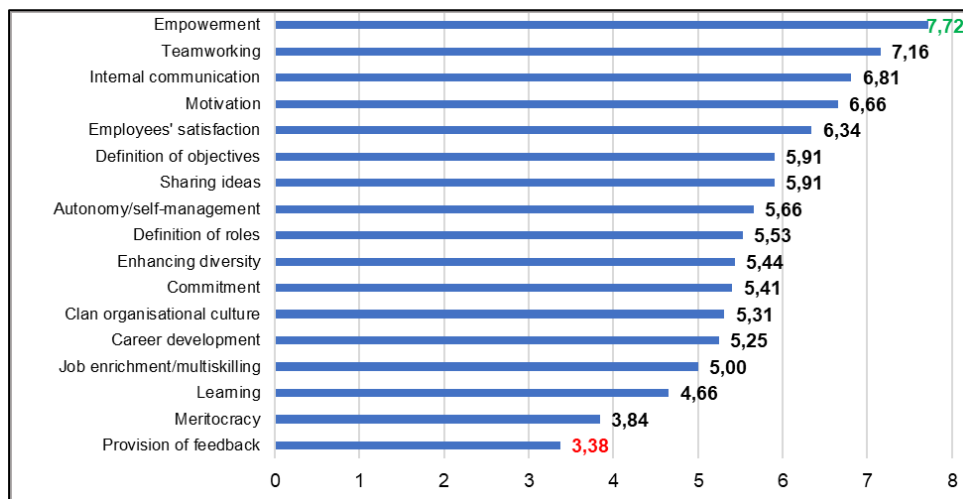


Fig. 6. The key PMM practices empowered by coaching.

Moreover, enhancing working in teams moves organizations towards fewer conflicts and advancement in democratic and participative management. As investigated by Smith and Bititci (2017), teamwork is discouraged if the organization focuses on individual performance, because it favours competition between employees. Rather, an empowered team, as an example of intervention in the social dimension of control, produces an increment in the technical control, i.e. performance measures (Smith and Bititci, 2017).

Third, “internal communication”, is defined as the way of exchanging information between the organization’s members which improves their relationships (Jacobs, Yu, & Chavez, 2016). High-performing organizations put great emphasis on both internal and external communication (Bititci *et al.*, 2011). Thanks to an effective way of communicating, trust, relationships and knowledge can be developed and disseminated within the organization (Jacobs *et al.*, 2016). Thus, effective communication reflects the ability of organizations to share internal information but also to provide feedback to employees, and

ensure a better organizational social climate, and goal-setting (Bourne *et al.*, 2013).

V. CONCLUSION

By relating coaching to the PMM framework of Smith and Bititci (2017), this research sheds light on the direct impact of coaching on PMM practices and its indirect impact on employee engagement and performance. The coaches identified three key PMM practices that successful coaching projects improve, i.e. empowerment, teamworking, and internal communication.

The recent developments in PMM research enable us to identify a relationship between the practices enhanced by coaching and the PMM practices. A recent trend in PMM adopts a balanced approach to evaluate organizational performance (Ates *et al.*, 2013; Garengo *et al.*, 2021; Nudurupati *et al.*, 2021; Smith and Bititci, 2017). As this study reveals, even if coaching acts mainly in this second dimension, i.e. the social dimension of control (Smith and Bititci, 2017; Tessier and Otley, 2012), it enriches also the first dimension, i.e. the technical dimension of control, through the definition of organizational objectives.

VI. LIMITATIONS AND FUTURE RESEARCH

Although this research contributes to answering the need for investigating the impact of coaching on organizational performance, there are some limitations.

Firstly, the PMM practices have been identified by adopting the coaches' perspective, thus, they do not consider the organizations' perspective. Secondly, the number of coaching cases allows the research group to deepen the PMM practices in order to relate the impact of coaching on PMM, however, it is not enough high to generalize the results to different organizational contexts.

To address the limitations described above, further research should be encouraged. Future studies should investigate the organizations' need to validate the identified PMM practices. The perspectives of coaches and organizations, indeed, need to be considered to deeply analyse also the long-term benefits derived from coaching projects. Moreover, to generalize the results, future research can develop a large-scale questionnaire to investigate whether the key PMM practices empowered by coaching could be extended also in other countries and other associations of coaching.

Finally, notwithstanding the relevance of the identification of the main PMM practices developed by coaching, future research needs to investigate how coaching has developed the main PMM practices.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

FB and PG conducted the research; FB analyzed the data; FB wrote the paper; PG revised the paper; all authors had approved the final version.

FUNDING

The research is part of a three-year project funded by the Italian Association of Professional Coaches (AICP).

REFERENCES

- Ates, A., Garengo, P., Cocca, P., & Bititci, U. 2013. The development of SME managerial practice for effective performance management. *Journal of Small Business and Enterprise Development*, 20(1): 28–54.
- Baron, L., & Morin, L. 2009. The coach-coachee relationship in executive coaching: A field study. *Human Resource Development Quarterly*, 20(1): 85–106.
- Betto, F., & Garengo, P. 2023. Coaching Effectiveness in Performance Measurement and Management: An Exploratory Review in the Industry 4.0 Era. *Proceedings of the 2023 14th International Conference on E-Education, E-Business, E-Management and E-Learning*, 256–260.
- Bourne, M., Pavlov, A., Franco-Santos, M., Lucianetti, L., & Mura, M. 2013. Generating organisational performance: The contributing effects of performance measurement and human resource management practices. *International Journal of Operations & Production Management*, 33(11/12): 1599–1622.
- Boysen, S., Cherry, M., Amerie, W., & Takagawa, M. 2018. Organisational Coaching Outcomes: A comparison of a practitioner survey and key findings from the literature. *International Journal of Evidence Based Coaching and Mentoring*, 16(1): 159–166.
- Bititci, U. S. 2015. *Managing business performance: The science and the art*. John Wiley & Sons.
- Bititci, U. S., Ackermann, F., Ates, A., Davies, J., Garengo, P., Gibb, S., Jillian MacBryde, J., Mackay, D., Maguire, C., van der Meer, R., Shafiq, F., Bourne, M., Firat, S. (2011). Managerial processes: business process that sustain performance. *International Journal of Operations & Production Management*, 31(8): 851–891.
- Bititci, U., Garengo, P., Dürfler, V., & Nudurupati, S. 2012. Performance measurement: challenges for tomorrow. *International Journal Of Management Reviews*, 14(3): 305–327.
- Coimbra, J., & Proença, T. 2023. Managerial coaching and sales performance: the influence of salesforce approaches and organisational demands. *International Journal of Productivity and Performance Management*, 72(10): 3076–3094.
- Conger, J. A., & Kanungo, R. N. 1988. The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3): 471–482.
- Dagley, G. R. 2010. Exceptional executive coaches: Practices and attributes. *International Coaching Psychology Review*, 5(1): 63–80.
- Evered, R. D., & Selman, J. C. 1989. Coaching and the art of management. *Organizational Dynamics*, 18(2): 16–32.
- Garengo, P., & Betto, F. 2024. The role of organisational culture and leadership style in performance measurement and management: a longitudinal case study. *Production Planning & Control*, 35(2): 151–169.
- Garengo, P., Biazzo, S., Simonetti, A., & Bernardi, G. 2005. Benchmarking on managerial practices: a tool for SMEs. *The TQM Magazine*, 17(5): 440–455.
- Garengo, P., Bititci, U., & Bourne, M. 2022. Performance measurement and management in Industry 4.0: Where are we? What next?. *International Journal of Productivity and Performance Management*, 71(4): 1005–1007.
- Garengo, P., Sardi, A., & Nudurupati, S. S. 2021. Human resource management (HRM) in the performance measurement and management (PMM) domain: a bibliometric review. *International Journal of Productivity and Performance Management*, 71(7): 3056–3077.
- Grant, A. M. 2012. ROI is a poor measure of coaching success: towards a more holistic approach using a well-being and engagement framework. *Coaching: An International Journal of Theory, Research and Practice*, 5(2): 74–85.
- Hamel, G. 2009. Moon shots for management. *Harvard Business Review*, 87(2): 91–98.
- Jacobs, M. A., Yu, W., & Chavez, R. 2016. The effect of internal communication and employee satisfaction on supply chain integration. *International Journal of Production Economics*, 171: 60–70.
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. 2001. A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26(3): 356–376.
- Melnik, S. A., Bititci, U., Platts, K., Tobias, J., & Andersen, B. 2014. Is performance measurement and management fit for the future?. *Management Accounting Research*, 25(2): 173–186.
- Naeem, H. M., & Garengo, P. 2022. The interplay between industry 4.0 maturity of manufacturing processes and performance measurement and management in SMEs. *International Journal of Productivity and Performance Management*, 71(4): 1034–1058.
- Neely, A., Gregory, M., & Platts, K. 1995. Performance measurement system design: A literature review and research agenda. *International Journal Of Operations & Production Management*, 15(4): 80–116.
- Nudurupati, S. S., Garengo, P., & Bititci, U. S. 2021. Impact of the changing business environment on performance measurement and management practices. *International Journal of Production Economics*, 232: 107942.
- Pavlov, A., Mura, M., Franco-Santos, M., & Bourne, M. 2017. Modelling the impact of performance management practices on firm performance: interaction with human resource management practices. *Production Planning & Control*, 28(5): 431–443.
- Phillips, J. J. 2007. Measuring the ROI of a coaching intervention, Part 2. *Performance Improvement*, 46(10): 10–23.
- Ribeiro, N., Nguyen, T., Duarte, A. P., de Oliveira, R. T., & Faustino, C. 2020. How managerial coaching promotes employees' affective

- commitment and individual performance. *International Journal of Productivity and Performance Management*, 70(8): 2163–2181.
- Scott, T. W., & Tiessen, P. 1999. Performance measurement and managerial teams. *Accounting, Organizations and Society*, 24(3): 263–285.
- Simons, R. 1995. *Levers of control: How managers use innovative control systems to drive strategic renewal*. Boston, MA: Harvard Business Press.
- Smith, M., & Bititci, U. S. 2017. Interplay between performance measurement and management, employee engagement and performance. *International Journal of Operations & Production Management*, 37(9): 1207–1228.
- Spreitzer, G., Porath, C. L., & Gibson, C. B. 2012. Toward human sustainability: How to enable more thriving at work. *Organizational Dynamics*, 41(2): 155–162.
- Tessier, S., & Otley, D. 2012. A conceptual development of Simons' Levers of Control framework. *Management Accounting Research*, 23(3): 171–185.
- Trotta, D., & Garengo, P. 2019. Assessing industry 4.0 maturity: An essential scale for SMEs. *Proceedings of the 2019 8th International Conference on Industrial Technology and Management (ICITM)*, 69–74.
- Whitmore, J. 2002. *Coaching for performance*. London: Nicholas Brealey Publishing. 108.
- Walker-Fraser, A. 2011. Coaching and the link to organizational performance: an HR perspective on how to demonstrate return on investment. *Development and Learning in Organizations: An International Journal*, 25(4): 8–10.

Copyright © 2024 by the authors. This is an open access article distributed under the Creative Commons Attribution License ([CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)), which permits use, distribution and reproduction in any medium, provided that the article is properly cited, the use is non-commercial and no modifications or adaptations are made.