Assessment of a team knowledge management measuring system performed at a Portuguese militarized unit: a psychometric study of the TKM scale

If, on the one hand, we have an abundance of literature with information regarding organizational knowledge management (Bogosian & Stefanchin, 2013; Ocean, 2009), on the other hand, we find that it is much scarcer as regards knowledge management in work teams (Xue, Bradley & Liang, 2011), as well as what concerns their measuring instruments. The objective of the present study was to analyze the psychometric qualities of the Team Knowledge Management (TKM) scale - the onedimensionality of each of the constructs referent to the processes that constitute it - at a militarized Portuguese unit. This scale was developed by Cardoso and Peralta (2011). It was conceived in accordance with Cardoso's (2007) multidimensional model, having been inspired by different theoretical contributions - American, Japanese and European theoretical orientations - which gave rise to the Knowledge Management (KM) scale. For the purposes of this study, this instrument originally designed for use in the organizational context, was thus adapted to the team context. The team knowledge management instrument allows for the assessment of 14 knowledge management processes divided into 6 sections: knowledge creation and acquisition; attribution of meaning to knowledge; knowledge sharing and dissemination; team memory; knowledge retrieval and utilization; and knowledge management catalysts. The processes that we used in this study are related to: creation and external acquisition; creation and internal acquisition; attribution of meaning to knowledge; sharing and intentional dissemination; sharing and unintentional dissemination; internal and intentional memory; internal and tacit memory; external memory; controlled retrieval; automatic retrieval; and use of knowledge. The choice of these 11 processes (we did not include the session on knowledge management catalysts), instead of the 14 that are part of the TKM scale, was due to two fundamental reasons: (1) the fact that they are catalysts, that is, aspects/activities that can enhance the other processes and, in this way, aiming to reduce the global scale, we opted not to include such catalysts (which have, as we have just mentioned, a somewhat different nature from the others, more than mere team knowledge management processes, they are stimulators of team knowledge management processes/activities), and, (2) the fact that the TKM scale offers us the advantage of being able to use the processes that best suit us, independently, according to the type of study that we intend to carry out. The study was conducted on a sample consisting of 2158 participants, members of a militarized unit - the GNR (Guarda Nacional Republicana [National Republican Guard, a military police force]). The construct validity, namely dimensionality, was evaluated by means of confirmatory factor analysis. All of the 11 processes revealed adequate adjustment. The reliability analysis of internal consistency, estimated on the basis of Cronbach's alpha, ranged from .70 to .89. The results allow us to reach the conclusion that the TKM scale possesses adequate psychometric qualities for the evaluation of team knowledge management in Portuguese militarized units.

Keywords: knowledge management in work teams; knowledge management; work teams; psychometric characteristics.

Bibliographic References:

- Bogosian, R., & Stefanchin, J. (2013, April). Silence is not always consent: Employee silence as a barrier to knowledge transfer. *Proceedings of the International Conference on Organisational Learning, Knowledge and Capabilities*, Washington, DC.
- Cardoso, L. (2007). Gerir conhecimento e gerar competitividade. Estudo empírico sobre a gestão do conhecimento e seu impacto no desempenho organizacional. Penafiel: Editorial.
- Cardoso, L., & Peralta, C.F. (2011). Gestão do conhecimento em equipas: Desenvolvimento de um instrumento de medida multidimensional. *Psychologica*, *55*, 79-93.
- Ocaña, A. (2009). Aproximación a una taxonomia de los modelos de gestión del conocimiento. Intangible Capital, 5(1), 65-101.
- Xue, Y., Bradley, J., & Liandg, H. (2011). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management*, 15(2), 299-312.