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Gdańsk, July 23, 2024

The review of Mrs. Guangyan Luo, M.Sc.'s dissertation entitled "Development of management method for managing cross-cultural teams in global companies", written under the supervision of Katarzyna Tworek, Ph.D., WUST Professor, submitted at Wroclaw University of Science and Technology

In compliance with the stipulations of the Act of July 20, 2018, Art. 187 - Law on Higher Education and Science (published in Dz.U. from 2023, item 742, as amended), a dissertation in the field of social science should:

- Demonstrate the candidate's general theoretical knowledge in the discipline (in this case, management and quality studies) or related disciplines, and the ability to independently conduct scientific work.
- 2. Provide an original solution to a scientific problem or an innovative application of the research results in the economic or social sphere.
- 3. Be presented as a written work, as applicable in this case.

This review pertains to the dissertation submitted by Mrs. Guangyan Luo, MSc., titled "Development of management method for managing cross-cultural teams in global companies," supervised by Katarzyna Tworek, Ph.D., WUST Professor, and submitted at Wroclaw University of Science and Technology. The review evaluates whether the dissertation meets the following criteria, i.e., the candidate has:

- 1a. Demonstrated general theoretical knowledge in the management and quality discipline or related disciplines.
- 1b. Shown the capability for self-reliance in conducting scientific research.
- 2. Provided an original solution to a scientific problem or presented an innovative application of her research results in the economic or social sphere.
- 3. Submitted a written dissertation for review.

The subsequent parts of this review will comment on the first two criteria. The third criterion has been fulfilled, as a written dissertation has been submitted for review.

1.

a. The general theoretical knowledge of the candidate in the management and quality science discipline and related disciplines

The dissertation under review spans 210 pages and consists of three chapters in the theoretical part: 1.) Theoretical Background, 2.) Management Method, and 3.) Hypotheses Development. These chapters allow for a thorough evaluation of whether the candidate demonstrates sufficient knowledge in the subject discipline and related fields.

Mrs. Guangyan Luo has conducted a literature review connected to the research problem, focusing on sources from 2000 to 2021. She adhered to the PRISMA method, clearly describing the inclusion and exclusion criteria and the number of studies included in the review, totaling 49. Despite the dissertation referencing 467 sources, it is noted that certain sources were not referred to in the text (e.g., sources 460, 459, 457, 445, 436, 403, 388). As the dissertation is submitted for defense in 2024, it would be more appropriate to include sources from 2022 and 2023 to ensure that the most current research is considered. Although the number of research works cited is substantial, many are older than ten years. A good practice is to include sources published within the last five years to reflect the latest findings, theories, or best practices. In this dissertation, only about 20% of the sources are from 2014 or later, indicating a potential oversight of recent important findings, particularly in areas such as cultural differences or the performance of global/multicultural/cross-cultural virtual teams.

Even when considering sources up to 2021, some significant research works were omitted, including Cagiltay et al. (2015), Eisenberg et al. (2021), Hung et al. (2021), Richter et al. (2021), Stahl and Maznevski (2021), Taras et al. (2019), Weyers and Wong (2021), and Zakaria and Ab Rahman Muton (2022). Moreover, I must disagree with the candidate's assertion that there remains a significant gap in the research on cultural diversity in virtual teams. Systematic literature reviews and meta-analyses available indicate that this topic is well-developed. A recent paper by Lynden (2024) confirms that cultural diversity, trust, leadership, and conflict management are among the most investigated areas in this field.

Despite these critiques, I find value in the literature review conducted by Mrs. Guangyan Luo. She demonstrates a strong ability to summarize, compile, and classify the literature, as evidenced by the comprehensive tables presented (e.g., Tables 2, 3, 6, 7, 14, 15, 17). Her thorough review of the collected sources allowed her to detect major theories and methods and recap results from the referred studies effectively. Thus, she possesses a sufficient theoretical foundation in management and quality science, as well as related disciplines like psychology and sociology. However, updating her references to include more recent research would strengthen her dissertation considerably.

b. Ability of the candidate to conduct scientific research

The candidate's ability to conduct scientific research independently reflects her capacity to identify research problems, design, and conduct studies based on identified gaps, and present and discuss findings. Mrs. Guangyan Luo conducted a mixed-method study aimed at designing and validating methods for performance improvement in cross-cultural virtual IT teams.

Based on the literature review, she first identified critical factors for performance improvement in cross-cultural virtual teams, then proposed a research model for statistical testing, and ultimately arrived at a model implemented in the selected IT virtual team. This approach shows consistency, logic, and maturity in designing and conducting research. All measures are well-described and substantiated by previous studies. The advanced analytical procedures are clear and well-executed, and the results are well-presented. The candidate is aware of the limitations of her study and suggests ways to address them in future research.

Nonetheless, some aspects could be better justified, such as why financial measures of performance were not collected and the rationale behind the choice of specific demographics. The nationality of the respondents is unclear, as is the language of the survey instrument. If the survey was in Polish, how were the items translated? Were the companies in the study Polish, or were they affiliates of multinational corporations (MNCs) in Poland? If they were MNC affiliates, how many MNCs were represented by the respondents?

Additionally, given that the survey used a cross-sectional design, the language in the hypotheses should avoid implying causality. It is more appropriate to state, for example, that "Collective orientation is positively related to cross-cultural virtual IT team performance" rather than "Collective orientation positively influences cross-cultural virtual IT team performance." The discussion should align the results with the latest available studies and remain coherent with the findings. Practical implications should not contradict empirical findings; for instance, if uncertainty avoidance is positively related to performance, why should companies aim to reduce it (p. 146)? Practical implications should also be contextualized with reference to previous studies. Hofstede's concept of strong uncertainty avoidance typically reduces risk-taking behaviors, contrary to the candidate's claim (p. 136) (e.g., Alipour, 2019).

Despite these shortcomings, the dissertation demonstrates the candidate's ability to conduct scientific research at an outstanding level.

2. Originality of research problem-solving or application of the candidate's research findings to the economic or social sphere

The survey method is appropriate for data collection for model testing, and the use of PLS-SEM is an advanced statistical procedure that was adequately applied in the dissertation. The empirical evidence collected is robust and offers interesting implications that could be tested in IT virtual teams

in companies located in other countries. Moreover, the findings were implemented in a real-case scenario, where the candidate thoroughly described the methodology and gathered substantial material in a type of action research that was analyzed scrupulously. The results are valuable, though not representative. Chapters 6 and 7 are the strongest parts of the dissertation, convincingly demonstrating that the research problem was originally solved and the findings applied to the economic and social sphere, specifically within an IT team in an MNC.

3. Other remarks

In my opinion, the title of the dissertation is slightly misleading. From the beginning, the candidate emphasizes that the study focuses on IT virtual teams, with empirical findings collected from the IT sector in Poland. Therefore, the dissertation title should be "Development of management method for managing cross-cultural teams in the IT sector."

The thesis structure includes three theoretical chapters, one methodological chapter, two research chapters, and an introduction and conclusion. All research chapters should ideally precede the conclusion. There are minor editing lapses, but overall, the thesis presents a good style and language. However, some parts, such as the practical implications and chapter summaries, seem AI-generated.

Regarding Chapter 2, grounded theory is an outcome of inductive scientific endeavors and cannot be adopted as a theory in the research, contrary to what is presented in Table 7. Furthermore, why does not Chapter 2 incorporate management methods identified in Chapter 1, where traits of virtual teams are presented? The dissertation describes numerous cultural difference theories, though it might have been more effective to focus on those most frequently used in studies on virtual teams.

The candidate mixes future research directions and practical implications within the discussion of results. This approach is somewhat disorganized. Separating these sections into dedicated parts—i.e., a distinct future research section (currently missing) and a practical implications section—would enhance clarity.

4. Conclusions

Considering the above reasons, the reviewed dissertation demonstrates originality in solving the research problem. The candidate has adequate theoretical knowledge in the field, along with above-average skills in conducting independent research and implementing findings in a real-case scenario. The dissertation meets the criteria stipulated in the Act and contributes significantly to the sub-fields of cross-cultural management and organizational behavior within the management and quality discipline.

Therefore, I recommend that the dissertation authored by Mrs. Guangyan Luo qualifies for the conferral of a degree.

References

- Alipour, A. (2019). The conceptual difference really matters: Hofstede vs GLOBE's uncertainty avoidance and the risk-taking behavior of firms. *Cross Cultural and Strategic Management*, 26(4), 467–489. https://doi.org/10.1108/CCSM-04-2019-0084
- Cagiltay, K., Bichelmeyer, B., & Kaplan Akilli, G. (2015). Working with multicultural virtual teams: critical factors for facilitation, satisfaction and success. *Smart Learning Environments*, 2(1), 11. https://doi.org/10.1186/s40561-015-0018-7
- Eisenberg, J., Glikson, E., & Lisak, A. (2021). Multicultural Virtual Team Performance: The Impact of Media Choice and Language Diversity. *Small Group Research*, *52*(5), 507–534. https://doi.org/10.1177/1046496420985614
- Hung, S.-W., Cheng, M.-J., Hou, C.-E., & Chen, N.-R. (2021). Inclusion in global virtual teams: Exploring non-spatial proximity and knowledge sharing on innovation. *Journal of Business Research*, *128*, 599–610. https://doi.org/https://doi.org/10.1016/j.jbusres.2020.11.022
- Lynden, K. D. (2024). A meta-review of global virtual team research: thematic insights and future directions. *Cross Cultural and Strategic Management*, *31*(2), 205–242. https://doi.org/10.1108/CCSM-11-2022-0196
- Richter, N. F., Martin, J., Hansen, S. V, Taras, V., & Alon, I. (2021). Motivational configurations of cultural intelligence, social integration, and performance in global virtual teams. *Journal of Business Research*, 129, 351–367. https://doi.org/https://doi.org/10.1016/j.jbusres.2021.03.012
- Stahl, G. K., & Maznevski, M. L. (2021). Unraveling the effects of cultural diversity in teams: A retrospective of research on multicultural work groups and an agenda for future research. *Journal of International Business Studies*, 52(1), 4–22. https://doi.org/10.1057/s41267-020-00389-9
- Taras, V., Baack, D., Caprar, D., Dow, D., Froese, F., Jimenez, A., & Magnusson, P. (2019). Diverse effects of diversity: Disaggregating effects of diversity in global virtual teams. *Journal of International Management*, 25(4), 100689. https://doi.org/https://doi.org/10.1016/j.intman.2019.100689
- Weyers, J., & Wong, A. (2021). Factors leading to global virtual team success. *International Journal of Business Excellence*, 24(4), 502–518. https://doi.org/10.1504/IJBEX.2021.117671
- Zakaria, N., & Ab Rahman Muton, N. (2022). Cultural code-switching in high context global virtual team members: A qualitative study. *International Journal of Cross Cultural Management*, 22(3), 487–515. https://doi.org/10.1177/14705958221137256

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