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REVIEW
of the doctoral dissertation by Sadi Huseynzade
entitled “The Impact of Sales Promotions on Consumer Buying Behaviour: A
Comparative Analysis from the Pandemic to the Post-Pandemic Period”
prepared at the Doctoral School of Social Sciences, University of Lodz,
under the supervision of dr hab. Anna Łaszkiewicz, prof. UŁ

The basis for preparing this review was the letter from Professor Ewa Walińska, Chair of the University of Lodz Committee for Academic Degrees in the Discipline of Management and Quality Studies, informing me that, at its meeting held on 29 June 2026, the Committee appointed me as a reviewer of the doctoral dissertation submitted by Mr Sadi Huseynzade. The dissertation was assessed pursuant to Articles 187 and 190(2)–(4) of the Act of 20 July 2018 – Law on Higher Education and Science (consolidated text: Journal of Laws of 2024, item 1571, as amended) and § 5(5)–(7) of the Regulations governing the detailed procedure for the award of doctoral and habilitated doctoral degrees at the University of Lodz (Resolution No. 660 of the Senate of the University of Lodz of 27 January 2020, as amended). The assessment addresses the relevance and justification of the research topic, the research objectives, questions and hypotheses, the structure and organisation of the dissertation, the research methods and tools employed, its scientific value, and its formal quality. The review concludes with an unequivocal overall assessment of the dissertation.

1. Assessment of the Selection of the Research Topic, Objectives, Research Questions and Hypotheses

The reviewed doctoral dissertation addresses changes in consumers’ evaluations of and responses to sales promotions between the COVID-19 pandemic and the post-pandemic period, while also comparing consumers from Poland and Azerbaijan. **The topic may be regarded as important and relevant**, particularly from the perspective of organisations operating in retail and consumer markets. Sales promotions are widely used marketing instruments through which

organisations seek to stimulate demand, influence purchasing decisions, introduce new products, build customer loyalty, and allocate marketing resources more effectively. Understanding how consumers respond to different promotional mechanisms under changing market conditions is therefore of both scientific and practical importance.

The relevance of the research is further supported by the **research gaps** identified in the dissertation. The Author highlights the limited knowledge concerning whether pandemic-related changes in consumer behaviour persisted into the post-pandemic period, as well as insufficient comparative evidence on how consumers respond to different promotional mechanisms across these periods. He also points to a shortage of cross-cultural comparisons between markets characterised by different levels of economic development and retail maturity, and to a lack of integrated studies examining promotional attractiveness, sensitivity to promotional frequency, promotional exposure and impulse purchasing within a single analytical framework. Taken together, the identified research gaps provide a coherent justification for undertaking the study and underline its scientific and practical significance. The comparison of Poland and Azerbaijan is particularly valuable in this respect, as it broadens the existing empirical evidence by examining consumer responses in two distinct economic, market and cultural contexts.

The **research problem** may be situated within management and quality studies, more specifically within the field of marketing and research on sales promotion and consumer behaviour. Sales promotions are instruments deliberately designed and implemented by organisations, and knowledge of consumer responses may support managerial decisions concerning the selection of promotional mechanisms, the timing and frequency of promotional campaigns, market segmentation, and the adaptation of marketing activities to particular product categories and national markets. The Author also formulates practical recommendations concerning the adjustment of promotional activities to market conditions and consumer decision-making patterns.

The **originality of the dissertation** does not arise from the investigation of entirely new phenomena or the introduction of new theoretical constructs, as the relationship between sales promotions and consumer behaviour has been extensively examined in the marketing literature. Rather, it lies in combining several dimensions that have usually been studied separately. The Author integrates the analysis of six promotional mechanisms with a comparison of consumer responses during the pandemic and post-pandemic periods, while adding a cross-country perspective encompassing Poland and Azerbaijan and combining quantitative and qualitative evidence. Particularly noteworthy is the comparison of consumers in two markets characterised

by different levels of economic development, retail maturity and cultural conditions, which have rarely been examined jointly within the same analytical framework. The originality of the dissertation is therefore primarily contextual and empirical, resulting from the configuration of established concepts and their examination in a distinctive comparative setting. In this respect, the research problem may be regarded as sufficiently original and capable of extending the existing knowledge on consumer responses to sales promotions under changing market conditions.

In the Introduction, the Author presents the rationale for selecting the topic and identifies the research gaps underlying the study. I assess these elements as generally relevant and appropriately linked to the subject of the dissertation. However, the separate section entitled “Research Problems” largely restates the previously identified gaps, which are subsequently repeated once again in the research questions. A research gap should indicate what is missing from existing knowledge, whereas the research problem should synthesise this deficiency into a clearly defined issue requiring investigation. In the dissertation, this distinction is blurred, making the presentation partly redundant. In the subsequent part, the Author formulates **six research objectives** which are logically connected and generally correspond to the scope of the study. Their hierarchy, however, is not entirely clear. The first objective is very broad and effectively serves as the principal objective, while objectives two to four elaborate its specific dimensions and the remaining objectives introduce the comparative perspective. It would therefore have been more appropriate to distinguish explicitly between one principal objective and several specific objectives. Moreover, some formulations, particularly “effectiveness” and “evolution”, are broader than the actual scope of the study and would benefit from greater terminological precision. Overall, despite these reservations, the objectives provide a coherent direction for the research.

The Author formulates **six main research questions**, with RQ1 further divided into six detailed questions, and **six main research hypotheses** supplemented by **ten sub-hypotheses**. Although their subject matter generally corresponds to the objectives of the dissertation, their formulation and theoretical grounding raise serious methodological reservations.

The principal weakness is that the **hypotheses were not derived from the theoretical part of the dissertation**. Each hypothesis should have been preceded by a synthesis of previous findings and a logical argument explaining why a particular relationship, difference or direction of effect was expected. The theoretical chapters should therefore have gradually led to the formulation of the respective hypotheses, which could then have been presented collectively in the methodology chapter. Instead, the hypotheses are introduced without such reasoning. The

identification of general research gaps and the subsequent description in Chapter Five of how the hypotheses will be measured do not constitute their theoretical justification. This problem is particularly evident in the directional predictions concerning a decrease in sensitivity to promotional frequency, a stronger relationship between promotional exposure and impulse purchasing during the pandemic, and the greater promotional responsiveness and preference for quantity-based promotions expected among Azerbaijani consumers.

The relationship between the **research questions and hypotheses is also problematic**. The simultaneous use of both is acceptable in a mixed-methods study if they perform different functions. If, as the Author repeatedly states, the qualitative component was intended to complement and contextualise the quantitative findings, the hypotheses should have guided the quantitative phase, whereas separate qualitative questions or follow-up probes should have been formulated or refined after the analysis of the quantitative results to explore findings requiring deeper interpretation. In this dissertation, however, each research question is almost directly reformulated as a corresponding hypothesis, as explicitly demonstrated in Table 12. No separate qualitative research questions derived from the quantitative findings are presented. Consequently, the research questions and hypotheses largely duplicate one another, while the questions do not perform the explanatory function attributed to the qualitative component.

The dissertation also **lacks an a priori research model** presenting the variables or constructs, the proposed relationships between them and their correspondence with H1–H6. Table 12 merely maps the research questions onto the hypotheses and analytical purposes and cannot replace a conceptual research model. Although preliminary and final path models are presented later in the results chapter, they were constructed after the analysis of the collected data and concern relationships between empirically extracted components rather than the original hypotheses. They should therefore be regarded as exploratory, data-driven models and cannot constitute the theoretical basis for the hypotheses.

More specifically, the following reservations arise in relation to the individual hypotheses:

- H1 and its six sub-hypotheses are empirically testable, but they are non-directional and are not supported by arguments explaining why differences between the two periods should be expected. The overarching H1 does not specify how the general attractiveness of sales promotions was constructed or how it should be evaluated when only some of the six sub-hypotheses are supported.
- H2 combines six separate measures of promotional attractiveness with several different behavioural tendencies. The hypothesis does not indicate which specific relationships are expected, whether the measures form aggregate constructs, or what result would constitute

its confirmation or rejection. Treating the occurrence of several significant correlations among numerous tested relationships as support for the entire hypothesis is therefore questionable.

- H3 is directional and potentially testable, but the expected decrease in sensitivity to promotional frequency is not derived from the literature. Moreover, “sensitivity to promotional frequency” is not adequately distinguished from respondents’ declared influence of frequent promotions on their shopping behaviour.
- H4 expresses a logically testable comparative relationship, but the predicted direction is not theoretically justified. Its correct verification would require a formal test comparing the two dependent correlation coefficients. Establishing the significance of each coefficient separately and comparing their numerical values does not demonstrate whether the strength of the relationships differs significantly.
- H5 refers to the influence of “cross-cultural factors”, although cultural orientations were not measured at the respondent level. The study compares Polish and Azerbaijani respondents and can identify differences between national groups, but it cannot demonstrate that these differences were caused by culture. H5a also combines numerous behaviours and both periods without specifying an unambiguous decision rule, while the directional prediction in H5b lacks a convincing theoretical basis.
- H6 and H6a largely duplicate one another. H6b combines two different techniques: BOGO and product bundling, and multiple product categories in a single hypothesis, without specifying how it should be evaluated when the predicted pattern occurs for one technique or category but not for another. The expected stronger preference among Azerbaijani consumers is also not sufficiently justified by previous research.

An additional reservation concerns the use of the terms “change” and “evolution” in H1–H4. The research is not longitudinal: assessments relating to both periods were collected retrospectively from the same respondents within a single survey process. The findings may therefore indicate differences between respondents’ retrospective evaluations of the pandemic and post-pandemic periods, but they cannot directly demonstrate actual changes in consumer behaviour over time.

In view of the absence of an a priori research model and the lack of systematic hypothesis development in the theoretical part of the dissertation, **I would ask the Doctoral Candidate** to reconstruct and justify the conceptual logic underlying the empirical study. In particular, please identify the principal variables or constructs and the relationships between them, indicate the theoretical and empirical premises on which the individual hypotheses, especially their

predicted directions, were formulated, and explain the criteria adopted for confirming or rejecting hypotheses that combine several promotional techniques, behavioural responses or product categories. **I would also ask the Doctoral Candidate to illustrate this explanation during the public defence** by presenting a clear conceptual model showing the variables, the directions of the proposed relationships and the corresponding hypotheses.

In conclusion, the choice of the dissertation topic may be regarded as relevant, timely and generally well justified by the identified research gaps, while the comparison of Poland and Azerbaijan adds contextual and empirical originality to the study. The research objectives correspond to the subject of the dissertation and broadly define the intended scope of the investigation. Serious reservations concern, however, the construction of the research questions and hypotheses, particularly their duplication, the failure to derive the hypotheses from the theoretical discussion, the ambiguity of some of their formulations and the absence of an a priori research model. These shortcomings do not undermine the relevance of the topic itself, but they substantially weaken the coherence and methodological foundations of the research design.

2. Assessment of the Structure and Organisation of the Dissertation

The dissertation consists of seven numbered chapters, followed by the Conclusion, Limitations of the Study, bibliography, lists of tables and figures, and four appendices containing the research tools. Its overall structure reflects the conventional division into theoretical, methodological and empirical parts, and **the sequence of the principal issues is logical**.

The length of the individual chapters is generally appropriate. Chapter Six, which presents the empirical findings, is considerably more extensive than the other chapters; however, this is justified by the scope of the empirical material and the inclusion of both qualitative and quantitative analyses. At the level of overall organisation, the issues discussed form a coherent whole, and the Doctoral Candidate consistently pursues the research objectives adopted in the dissertation.

3. Assessment of the Research Methods and Tools

The research methodology adopted in the dissertation broadly reflects its subject matter, research problem and objectives. The theoretical part was prepared on the basis of literature studies, combining a narrative review with a systematic literature review based on the PRISMA framework. The attempt to systematise previous findings should be appreciated; however, for the reasons indicated in the assessment of Chapter Three (Section 4 of this review), the

systematic literature review is incomplete and does not fully meet the requirements of methodological transparency and reproducibility. The bibliography is relatively extensive and comprises 194 items, predominantly English-language publications, including both classical and recent studies.

The empirical **research adopted a mixed-methods approach** combining a quantitative online survey with semi-structured qualitative interviews. The choice of this approach is appropriately justified by the complexity of the research problem: the survey enables the identification of patterns, relationships and differences in consumer responses, while the interviews may provide a deeper understanding of their underlying motivations and contextual conditions. However, the type and sequence of the mixed-methods design are not presented consistently. The Author repeatedly states that the qualitative component was intended to complement and contextualise the quantitative findings, while elsewhere both components are described as having been conducted “in parallel”. Meanwhile, the survey was administered between July 2024 and December 2025, whereas the interviews were conducted between January 2023 and February 2025. The qualitative stage therefore began considerably earlier and ended before the quantitative stage was completed, which makes it unclear how it could have served as a follow-up explanation of the survey results.

Moreover, the **comparison between the pandemic and post-pandemic periods is based on retrospective assessments** collected within a single research process rather than on longitudinal observations. Such a design may be used to examine respondents’ recalled perceptions and declared behaviours, but it does not provide direct evidence of actual changes over time. A particularly important reservation concerns **the lack of sufficiently precise operational definitions of the two reference periods**. Although on page 7 the Author formally associates the post-pandemic period with the termination of the WHO global health emergency on 5 May 2023, he also states that the transition to this period began earlier. Neither the survey questionnaire nor the interview guide specifies the temporal boundaries of the “pandemic” and “post-pandemic” periods or indicates that these boundaries were communicated to the respondents. Consequently, respondents may have interpreted both periods differently, which weakens the temporal validity and comparability of the findings. This issue is especially relevant given that the qualitative interviews commenced in January 2023, before the formal date adopted by the Author as marking the post-pandemic period.

In view of the above, I would like the Doctoral Candidate to address the following **two questions during the defence**:

- Should the adopted mixed-methods design be classified as sequential, concurrent or multiphase, and at which specific stages were the quantitative and qualitative components integrated? In particular, how could the interviews complement and explain the quantitative findings if they began before the survey and were completed before the quantitative data collection had ended? How does this sequence affect the extent to which the qualitative findings may be regarded as explaining or triangulating the survey results?
- What precise temporal boundaries were adopted for the pandemic and post-pandemic periods, and how were these definitions communicated to the respondents? How was a consistent understanding of both periods ensured across the two countries and research components, particularly given that the qualitative interviews commenced in January 2023, before the date formally associated in the dissertation with the post-pandemic period?

The quantitative component was conducted using the survey **method** and the CAWI technique, with a structured questionnaire administered through Google Forms. The choice of online data collection was appropriate and reasonably justified by the cross-national character of the study, geographical accessibility and the high level of Internet use in both countries. The study included 300 **respondents**, equally divided between Azerbaijan and Poland. Snowball **sampling** may be acceptable in exploratory consumer research when access to a sampling frame is limited; however, its implementation in the dissertation is insufficiently **documented**. The Author does not identify the initial respondents through whom recruitment began, the specific platforms and networks used to distribute the questionnaire, the number of people initially contacted, the development of the referral chains or the response rate. It is also unclear how exactly 150 respondents were obtained in each country, whether national quotas were established in advance and whether further responses were excluded after each quota had been reached. The sample size is not necessarily insufficient for the basic statistical tests applied in the dissertation, but no power analysis or other justification of the required sample size is provided. More importantly, the non-probability sampling procedure and the demographic structure of the sample substantially limit its representativeness. Respondents were predominantly young, female and highly educated: 74.3% were under 35 years of age, 61.3% were women and 75.3% had completed higher education. The Azerbaijani group was also considerably younger than the Polish group. Since the two national samples were neither demographically matched nor statistically adjusted for these differences, some of the observed cross-country differences may reflect differences in age, gender, education or income rather

than national or cultural context. The equal group sizes facilitate statistical comparison but do not ensure comparability or representativeness. Contrary to the Author's assertion that the online format supports the "greater generalizability of findings" (p. 88), the results refer exclusively to the surveyed sample and cannot be generalised to the populations of Polish and Azerbaijani consumers. **I would therefore ask the Doctoral Candidate to explain** the sampling procedure in greater detail, including the selection of the initial participants, the distribution channels, the development of the referral chains and the method used to obtain exactly 150 respondents in each country. Please also justify the sample size and explain how the demographic differences between the national groups affect the interpretation of the cross-country comparisons.

The quantitative research tool was a structured questionnaire prepared in English, Polish and Azerbaijani and divided into five thematic sections. Its strengths include the use of parallel questions referring to the pandemic and post-pandemic periods, the application of uniform response scales and the inclusion of all three language versions in the appendices. These features support the standardisation and transparency of data collection. The construction of the tool nevertheless raises substantial methodological reservations. Most importantly, the dissertation does not present a systematic operationalisation of the variables showing their definitions, indicators, corresponding questionnaire items, measurement scales, sources and links to the hypotheses. Although selected concepts are described in the section concerning the hypotheses, it remains unclear whether the questionnaire items were adapted from validated scales available in the literature or developed independently by the Author. No information is provided about pilot testing, content or construct validity, or the reliability of the measures. The principal component analysis subsequently conducted in the empirical part is exploratory and data-driven and therefore cannot substitute for an ex ante operationalisation of the variables and validation of the research instrument. This is particularly important in a cross-country study, in which the equivalence of measurement between the Polish and Azerbaijani versions of the questionnaire should also have been demonstrated.

Some individual questions are also insufficiently precise. Question 8 does not indicate whether respondents were permitted to select one or several factors; this becomes clear only from the presentation of the results. Questions concerning whether respondents had previously seen particular promotional deals appear to function as screening questions, but their analytical role and the routing applied in the questionnaire are not explained. Since all questions are described as mandatory, it is unclear how respondents who had not seen a particular promotion were prevented from evaluating its attractiveness and how their answers were subsequently

coded. Similarly, Question 31 does not clearly specify whether respondents were required to select one or several promotional deals for each product category, although the subsequent analysis appears to assume a single response. These ambiguities reduce the reproducibility of the study and make it more difficult to assess the validity of the measurement and the substantive meaning of the resulting statistical relationships.

The Author acknowledges selected **sources of bias** in the “Limitations of the Study” section (pp. 219–220), including the retrospective nature of the assessments, recall bias, the subjectivity of self-reported behaviour and the possibility of socially desirable responses. This demonstrates awareness of some important limitations of the quantitative study. However, the discussion does not address other risks relevant to the adopted research design, particularly self-selection and network bias resulting from snowball sampling, coverage bias associated with online distribution, common method bias arising from measuring explanatory and outcome variables through the same questionnaire, and possible measurement inequivalence between the three language versions. The dissertation also does not report any procedures used to diagnose or mitigate these risks.

In assessing the **qualitative study**, which was conducted by means of **twelve semi-structured in-depth interviews**, the choice of this method may generally be regarded as appropriate for exploring consumers’ motivations, experiences and interpretations of promotional activities. The inclusion of six participants from each country provides a formally balanced basis for comparison. However, the implementation of purposive sampling remains insufficiently transparent. The Author states only that the participants possessed relevant purchasing experience and that demographic and socio-economic variation was sought, but neither of these criteria is operationalised. The dissertation does not indicate how and where the participants were recruited, who was initially approached, which inclusion and exclusion criteria were applied, or whether any of the interviewees had previously participated in the quantitative survey. Indeed, since the interviews commenced in January 2023 and the survey did not begin until July 2024, the qualitative sample as a whole could not have been recruited as a follow-up subsample of survey respondents. Although socio-demographic information was collected during the interviews, neither the methodological chapter nor the presentation of the qualitative findings provides a systematic profile of the twelve participants. Only isolated contextual details appear in the discussion of individual statements. Consequently, it is not possible to assess how the declared purposiveness and diversity of the sample were achieved or whether the two national groups were comparable. A sample of twelve participants is not

inherently insufficient for a focused qualitative study, but its size and composition require justification in terms of the study's analytical scope and the informational value of the cases.

The **interview guide** contains open-ended, experiential and comparative questions and encourages participants to explain the reasons for their behaviour, which could provide contextual insight beyond that obtained from the survey. Nevertheless, the questions largely reproduce the areas examined quantitatively, such as changes in shopping habits, purchasing channels, factors influencing decisions and preferences for promotions across product categories. The dissertation does not demonstrate that the interview questions or follow-up probes were developed in response to the quantitative findings; consequently, the interviews appear more suitable for parallel illustration and triangulation than for explaining the survey results. The guide also contains internal inconsistencies: Question 6 in the pandemic section refers to promotional offers used "before the pandemic", whereas Question 1 in the post-pandemic section again asks about changes "during the pandemic". An additional concern relates to linguistic comparability. Azerbaijani participants were interviewed in their native language and their responses were translated into English, whereas Polish participants were interviewed directly in English. The Author does not explain the participants' level of English proficiency or describe any procedure used to verify the accuracy and equivalence of translation.

The interviews were audio-recorded, transcribed verbatim and anonymised, which constitutes an appropriate element of the research procedure. **Reflexive thematic analysis** is also a suitable method for analysing this type of material. Its practical application is, however, insufficiently documented. The Author states that both deductive and inductive coding were possible, but does not specify which analytical orientation was actually adopted, how initial codes were generated and revised, how they were combined into themes, or how the final three themes were reviewed and defined. Nor is the role and reflexivity of the researcher in interpreting the material explained. The final themes closely reflect the structure of the interview guide and the research questions, which raises doubt as to the extent to which they emerged from the data rather than being predetermined by the research framework. Although a fixed codebook is not an obligatory requirement of reflexive thematic analysis, the inclusion of a coding tree, a list of principal codes or examples illustrating the transition from data extracts through codes to themes would have considerably increased the transparency and credibility of the analysis.

In view of these reservations, **I would ask the Doctoral Candidate to address the following questions during the defence:**

- Please specify the inclusion and selection criteria applied in recruiting the twelve interview participants, the recruitment channels and source populations, and whether any participants had previously taken part in the quantitative survey. Please also explain how variation and comparability within and between the two national groups were ensured and on what basis the sample size was considered analytically sufficient.
- How exactly was the qualitative material coded and transformed into the three final themes? Please indicate whether the analysis was primarily deductive, inductive or combined, and illustrate the analytical process with an example showing the transition from an interview extract through an initial code to a theme.

In conclusion, the overall **research strategy is appropriate to the subject and objectives of the dissertation**. Combining literature studies, a quantitative survey and qualitative interviews provides a potentially valuable basis for examining the research problem from complementary perspectives. Its implementation and documentation are, however, **weakened** by the inconsistent sequencing and insufficient integration of the research components, the unclear operationalisation of the periods and variables, limitations in sampling, insufficient validation of the questionnaire, and the lack of transparency in the qualitative coding procedure.

4. Assessment of the Scientific Value of the Dissertation

The scientific value of the dissertation is assessed with reference to its individual chapters. **Chapter One** introduces the subject of the dissertation and presents the rationale for undertaking the research, the identified research gaps and research problems, as well as the research objectives, questions and hypotheses. It establishes the general scope and direction of the study, although, as noted above, the presentation is partly repetitive, particularly with regard to the research gaps, research problems and research questions. It is also regrettable that the Introduction does not include a concise outline of the dissertation's structure and the content of its subsequent chapters. Such an overview is a standard element of an introduction and would help the reader understand the logic of the dissertation and the relationships between its theoretical, methodological and empirical parts.

Chapter Two offers a broad and orderly overview of sales promotion and provides a useful conceptual foundation for the empirical part of the dissertation. Nevertheless, the discussion remains predominantly descriptive and, at times, textbook-like, with limited critical comparison and synthesis of the cited studies. Moreover, the presentation of the behavioural effects of sales promotion is insufficiently balanced. While the benefits are discussed in a separate subsection,

the potential adverse effects are addressed only fragmentarily, although they constitute an equally important dimension of consumer responses. A more systematic discussion of both positive and negative effects should have been included in this chapter, with the systematic literature review in Chapter Three subsequently developing and synthesising the relevant empirical evidence. The selection of the six promotional techniques examined in the study is also not fully justified, particularly as the exclusion of other techniques discussed in the chapter is not sufficiently explained.

Chapter Three presents a systematic literature review of sales promotion and consumer buying behaviour during and after the COVID-19 pandemic. On the positive side, the Author attempts to organise the findings of 60 publications, considering both the positive and negative effects of promotional activities and pandemic-related changes in consumer behaviour. The tables and descriptive analyses facilitate orientation in the literature and provide information on publication trends, geographical contexts and approaches used in previous studies. The chapter therefore has a useful systematising value and identifies several tendencies and research gaps relevant to the empirical part of the dissertation.

Nevertheless, the methodological description does not ensure the full reproducibility of the review. The exact search strings, search date, number of records retrieved from each database, duplicate-removal procedure, detailed screening and coding process, and method of assessing the quality of the included studies are not reported. Moreover, the composition of the final publication set, including numerous studies only indirectly related to sales promotion and a limited visible representation of core marketing journals, raises doubts about the precision and relevance of the search strategy. There is also an inconsistency between the PRISMA diagram and the accompanying description: the diagram indicates that 20 publications were excluded after full-text review, whereas the text states that they were excluded during title and abstract screening and that all 60 full-text articles were subsequently included. The adopted time frame of 2012-2022 also raises serious reservations. The Author neither explains why 2012 was selected as the starting point nor clarifies the role of pre-pandemic publications in achieving the review objectives. At the same time, limiting the review to 2022 does not allow the post-pandemic literature to be adequately represented, particularly since the dissertation itself associates the formal beginning of the post-pandemic period with May 2023.

Reservations also concern the organisation and presentation of the results. The descriptive and bibliometric characteristics of the publication set are presented only after the thematic analysis of its content. Although this sequence does not formally contradict the PRISMA guidelines, the reverse order would provide a clearer and more logical structure. Furthermore,

the columns entitled “Methodology(s)” in Tables 3-8 primarily report statistical techniques, such as PLS-SEM, MANOVA, ARIMA or regression, rather than the research designs and methods employed. Research approaches, data collection methods, analytical techniques and theoretical models are placed within the same category, while information concerning the research context, sample size and selection procedure, data sources and study design is generally missing. Consequently, the tables do not provide a sufficient basis for assessing the comparability, methodological quality and generalisability of the reviewed studies. The synthesis also remains largely descriptive, and some of the analysed themes extend beyond sales promotion. Thus, despite its useful organising function, the chapter does not fully meet the methodological and analytical standards expected of a systematic literature review.

Chapter Four provides a socio-economic and cultural contextualisation of Azerbaijan and Poland, which is justified by the comparative nature of the dissertation. On the positive side, the Author uses recent statistical data and discusses pandemic-related changes in consumer behaviour in both countries according to a parallel structure. The inclusion of GDP per capita is briefly justified, while the application of Hofstede’s framework facilitates the identification of selected national-level cultural similarities and differences. The analytical value of the chapter is, however, limited. Although GDP per capita is a relevant contextual indicator, the rationale for restricting the socio-economic comparison to GDP per capita and life expectancy is not sufficiently developed. In particular, life expectancy is only indirectly related to consumer purchasing behaviour, while the claim that its post-pandemic increase reflects renewed consumer optimism and stronger engagement with sales promotions goes beyond the evidence presented. Indicators more directly related to purchasing power and market conditions, such as inflation or household consumption, could have strengthened the comparison. Furthermore, the use of GDP per capita in current US dollars limits the validity of comparisons over time and between the two countries.

The cultural scores presented in Figure 10 were taken directly from The Culture Factor Group’s country comparison tool. Although their source is indicated and the Author appropriately acknowledges that they represent aggregate societal tendencies rather than individual behaviours, the dissertation does not explain their empirical basis or the rationale for selecting this particular cultural framework. Consequently, the indices may provide a general context for the comparison, but they cannot directly demonstrate that differences between Polish and Azerbaijani respondents are caused by culture. The chapter also lacks an integrating conclusion linking the identified socio-economic and cultural differences to responses to the six promotional techniques examined in the empirical study. Overall, Chapter Four provides

useful background information, but remains predominantly descriptive and is only partly integrated with the empirical framework of the dissertation.

Overall, I **assess the theoretical part of the dissertation**, contained in Chapters Two to Four, as **satisfactory**, although with important reservations. Its strength lies in the broad coverage of sales promotion and consumer behaviour, the attempt to systematise previous research through a systematic literature review, and the inclusion of the socio-economic and cultural contexts of Poland and Azerbaijan. These considerations demonstrate the Author's general familiarity with the subject and provide useful background for the empirical study. However, the discussion remains predominantly descriptive, offers limited critical synthesis of the literature, and is weakened by the methodological deficiencies of the systematic literature review identified above. Most importantly, the individual chapters are not sufficiently integrated into a coherent theoretical framework that would directly underpin the research model and hypotheses. Consequently, this part of the dissertation provides a relevant knowledge base, but only partially fulfils its function as a theoretical foundation for the empirical research.

Chapter Five presents the research methodology, including the mixed-methods design, data collection procedures, research instruments, research objectives, questions and hypotheses. The Author provides a general justification for combining quantitative and qualitative methods and appropriately clarifies the non-causal and self-reported nature of the findings. Without repeating the detailed assessment of the methods and research tools presented in Section Three of this review, I conclude that the chapter organises the principal elements of the research procedure, but does not document them with sufficient precision, consistency and transparency to provide a fully convincing methodological foundation for the empirical study.

Chapter Six presents the results of the qualitative and quantitative research. Its strength lies in the considerable amount of empirical material collected and in the generally clear presentation of the findings through tables, figures and selected interview quotations. Several of the non-parametric tests are, in principle, appropriate to the scale and structure of the data. The chapter also provides comparisons between the pandemic and post-pandemic periods and between Polish and Azerbaijani respondents. Nevertheless, the scientific value of the results is substantially weakened by limitations in the operationalisation of variables, hypothesis testing and interpretation of the statistical findings. The presentation of the qualitative findings before the quantitative results is also difficult to reconcile with the declared explanatory role of the interviews, particularly in view of the previously discussed chronology of data collection. Although the interview quotations illustrate the identified themes, the insufficiently

documented coding procedure and participant selection limit the transparency and credibility of the qualitative findings.

The procedures used to **test the individual hypotheses** raise the following reservations:

- In the case of H1 and H1a–H1f, the Wilcoxon signed-rank test is generally appropriate for comparing paired ordinal evaluations. However, the umbrella hypothesis H1 is not tested directly but is assessed on the basis of several separate tests relating to individual promotional techniques. No adjustment for multiple testing is reported. More importantly, the hypothesis concerns differences in perceived attractiveness, whereas parts of the interpretation refer to the influence or effectiveness of promotions and to changes in buying behaviour. These conclusions go beyond the variable that was actually measured.
- For H2, Spearman's rho is an appropriate non-parametric measure for the item-level change scores. However, the analysis correlates changes in the attractiveness of six promotional techniques with changes in four behavioural statements, producing numerous item-level relationships, most of which are weak, without constructing or validating the broader variables included in the hypothesis. No correction for multiple comparisons is reported. The occurrence of several statistically significant correlations among numerous tested relationships does not provide sufficient grounds for accepting such a broadly formulated hypothesis.
- The Wilcoxon test applied to H3 is appropriate for comparing paired responses across the two retrospectively assessed periods. However, sensitivity to promotional frequency is operationalised through a single questionnaire statement, without evidence that this item provides a valid and reliable measure of the concept. The result therefore concerns this particular self-reported item rather than a validated construct.
- H4 proposes that the relationship between promotional exposure and impulse purchasing was stronger during the pandemic than in the post-pandemic period. The Author calculates two Spearman correlation coefficients, but does not conduct a formal test comparing these dependent correlations. Demonstrating that both correlations are significant does not establish whether their strength differs significantly. Consequently, H4 is not formally tested; the results show only that the relationship is descriptively stronger in the post-pandemic assessments.
- The Mann–Whitney U tests used for H5 are suitable for comparing the two national samples with respect to ordinal responses. Nevertheless, a difference between Polish and Azerbaijani respondents cannot by itself be interpreted as the influence of cultural

factors. Culture was not measured at the respondent level, and other socio-economic and demographic explanations were not controlled. Moreover, multiple item-level comparisons were conducted without reporting effect sizes or adjustments for multiple testing.

- Pearson's chi-squared test used for H6 is generally appropriate for examining the relationship between nationality and preferred promotional type within individual product categories. However, significant omnibus tests for selected categories do not directly establish the specific directional pattern proposed in H6b. This would require appropriate post-hoc comparisons or an explicitly defined contrast. Here too, multiple category-level tests are conducted without an adjustment for multiple comparisons, while effect sizes such as Cramér's V are not reported.

Chapter Six additionally contains an exploratory cluster analysis that yields potentially useful and relatively interpretable consumer profiles. Its validation is, however, limited: the subsequent Mann–Whitney and Kruskal–Wallis tests use the same variables from which the clusters were derived, and no assessment of cluster stability or external validation is reported. Because separate solutions were estimated for the two retrospectively assessed periods, changes in cluster membership should be interpreted descriptively rather than as evidence that consumers actually migrated between segments over time.

Further reservations concern the principal component analysis (PCA) and the subsequent path analysis. PCA was used to reduce the promotion-perception and consumer-behaviour items to a smaller number of components, but the dissertation does not report the KMO measure, Bartlett's test of sphericity, communalities, the proportion of explained variance, the rotation method or reliability coefficients. The tables report what are described as factor loadings, although the procedure produces component loadings. The composition of the promotional-perception components also differs between the pandemic and post-pandemic periods, and one of the post-pandemic components is based on only two items. Their comparability across periods is therefore not sufficiently demonstrated. The removal of the item concerning e-mail or text notifications solely because of its negative loading also requires stronger methodological and substantive justification.

The subsequent analysis should be understood as path analysis based on observed component scores rather than as a latent-variable SEM. Consequently, measurement error is not explicitly modelled and no confirmatory measurement model is assessed. The preliminary model includes what the Author describes as “all theoretically possible relationships”, but the theoretical grounds for the individual paths are not sufficiently developed. The removal of

statistically insignificant paths to obtain the final model makes the analysis largely data-driven and may improve fit at the expense of the model's replicability. Although the reported CFI, RMSEA and SRMR values indicate good fit, the presentation does not include the full information needed to assess the model, including the chi-squared statistic, degrees of freedom, the RMSEA confidence interval and the fit of the preliminary model. The number of observations used at the consecutive stages and the treatment of missing evaluations also require clarification. In particular, the correlations between component scores are reported with 109 degrees of freedom, indicating 111 observations, whereas the path model is reported as having been estimated on the total sample of 300 respondents.

The Author explicitly acknowledges that the research is non-experimental, retrospective and based on self-reported assessments, and that its results should not be interpreted as evidence of direct causal effects. This methodological qualification is appropriate. Nevertheless, some interpretations in Chapter Six are not fully consistent with it. References to a "longitudinal link", consumers "migrating" between segments, the post-pandemic environment acting as a "catalyst", or habits formed during the pandemic persisting afterwards suggest temporal or causal conclusions that cannot be established on the basis of a single retrospective study. The findings may demonstrate associations and consistency between respondents' assessments of the two periods, but they do not document actual behavioural change over time.

Chapter Seven discusses the findings according to the individual hypotheses and attempts to integrate the quantitative results, qualitative interviews and relevant literature. Its structure is transparent, and the qualitative material provides useful context for interpreting some of the statistical findings. The chapter is, however, excessively extensive and frequently repeats the results presented in Chapter Six, particularly in Section 7.7. The integration of the quantitative and qualitative components consists mainly of juxtaposing convergent findings, while the interviews are sometimes presented too strongly as confirming or validating the statistical results. Some interpretations also exceed the evidence provided, especially those concerning actual behavioural change and cultural explanations of differences between Polish and Azerbaijani respondents. Furthermore, the literature is used primarily to support interpretations consistent with the findings, while relatively little attention is devoted to contradictory evidence, alternative explanations or the theoretical implications of the study. Overall, the chapter provides a useful synthesis but would benefit from substantial condensation and a more critical and theoretically oriented discussion.

In assessing **the methodological and empirical part of the dissertation**, I conclude that the Doctoral Candidate has undertaken extensive data collection, organised a considerable body

of empirical material and used a broad range of quantitative and qualitative analytical techniques. The research provides interesting descriptive and comparative findings corresponding to the objectives of the dissertation. However, the methodological limitations concerning the research design, sampling, operationalisation of variables, hypothesis testing and integration of the quantitative and qualitative components weaken the conclusiveness of some findings. Consequently, the empirical results have primarily descriptive and exploratory value and require cautious interpretation.

In the conclusion, the Author summarises the principal findings, relates them to the research objectives and hypotheses, identifies the theoretical, empirical and practical contributions of the study, and formulates recommendations for organisations. The conclusion is comprehensive, although it partly repeats the discussion presented in Chapter Seven.

The **scientific contribution of the dissertation** does not consist in developing a new theory or an original theoretical model, but rather in extending and contextualising existing knowledge through comparative empirical research. The study broadens the evidence concerning consumers' self-reported responses to six sales promotion techniques and their variation between the retrospectively assessed pandemic and post-pandemic periods in Poland and Azerbaijan. Its particular value lies in demonstrating that consumer responses differ depending on the promotional mechanism, product category and national market context.

From the perspective of management and quality studies, the findings concern marketing decisions made by organisations regarding the design, selection and adaptation of promotional activities. At an exploratory level, they may offer preliminary indications for the configuration of promotional instruments, consumer segmentation and the adjustment of promotional strategies to different markets and product categories. Therefore, despite the reservations presented in this review, I consider the dissertation to make a modest but identifiable contribution to management and quality studies, primarily of an empirical and application-oriented nature.

5. Formal and Linguistic Aspects of the Dissertation

The dissertation has been prepared in accordance with the formal requirements applicable to doctoral dissertations. It is written in generally clear and understandable language and is relatively easy to read, despite occasional linguistic and editorial imperfections. The presentation is enriched by 31 figures and 48 tables, which generally provide a clear illustration of the theoretical considerations and empirical findings.

6. Final Conclusions

Taking into account the relevance of the research topic, the scope of the literature review, the comparative empirical research conducted in Poland and Azerbaijan, and the descriptive and exploratory value of the findings, I conclude that the dissertation demonstrates the Doctoral Candidate's general theoretical knowledge in management and quality studies and his ability to conduct scientific research independently. The comparative examination of consumers' responses to different sales promotion techniques constitutes an original empirical solution to the research problem, although one of limited scope and predominantly descriptive and exploratory value, and provides a modest empirical and application-oriented contribution to the discipline.

At the same time, the dissertation contains numerous methodological and interpretative shortcomings, discussed in detail in this review. They substantially limit the generalisability and scientific significance of some conclusions. Nevertheless, these reservations do not negate the scholarly and empirical value of the research. Taken as a whole, the dissertation meets the minimum statutory threshold applicable to doctoral dissertations.

Therefore, pursuant to Article 187 of the Act of 20 July 2018 – Law on Higher Education and Science, I conclude that the dissertation meets the requirements for the award of a doctoral degree in the field of social sciences, in the discipline of management and quality studies. **My overall assessment of the dissertation is positive**, and I recommend its acceptance and the admission of the Doctoral Candidate to the public defence.