# SOWI-Research-News

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#### WZ Betriebswirtschaft

### Marketing

Disintermediation of consumer services through blockchain? The role of intermediary brands, value-added services, and privacy concerns

This paper explores the dynamics between value-added services, intermediary brands, and consumer privacy concerns in shaping attitudes toward blockchain-enabled consumer services. Grounded in the Antecedents-Privacy Concerns-Outcomes (APCO) framework, we develop a theoretical model that we test in three experimental studies with a total of 1,613 participants, utilizing verbal scenarios featuring blockchain applications for international money transfer and hotel booking. Our research reveals that complete disintermediation via pure peer-to-peer blockchain transactions is unlikely. Consumers prefer blockchain applications offering supplementary services like call centers, password assistance, and cancellation options. As consumers become familiar with blockchain technology, privacy concerns intensify due to its distributed and immutable storage. The fears of data breaches are more pronounced when blockchain applications are offered by unknown startups as opposed to well-known Big Tech companies. However, privacy-conscious consumers also value the prospect of distancing themselves from big-data ecosystems by embracing blockchain solutions from startups. Our research extends the APCO framework by clarifying how privacy concerns, brand-based heuristics, and technological attributes interact. For managerial implications, blockchain applications necessitate reintermediation to meet consumer preferences. Potential intermediaries, including Big Tech firms, startups, and industry incumbents, face unique challenges in developing and marketing blockchainenabled consumer services.

Strebinger, Andreas; Treiblmaier, Horst (2024), Disintermediation of consumer services through blockchain? The role of intermediary brands, value-added services, and privacy concerns, in: International Journal of Information Management, 78 (October 2024), 102806. https://doi.org/10.1016/j.ijinfomgt.2024.102806

Ranking: JIF (2023): 20.1; SJR (2023): 5.775

### The evolution of artificial empathy in the hospitality metaverse era

As hospitality enters the metaverse era, artificial empathy becomes essential for developing artificial intelligence (AI) agents. Using the empathy cycle model, computational empathy frameworks and interdisciplinary research, this conceptual paper proposes a model explaining how artificial empathy will evolve in the hospitality metaverse era. The paper also addresses customer empathy and responses towards AI agents and other human actors with in the hospitality context. It explores how metaverse characteristics such as immersiveness, sociability, experiential nature, interoperability, blended virtual and physical environments as well as environmental fidelity will shape computational models and evolution of artificial empathy. Findings suggests that metaverse enables AI agents to form a seamless cycle of detection, resonation, and response to consumers' affective states, facilitating the evolution of artificial empathy. Additionally, the paper outlines conditions under which the artificial empathy cycle may be disrupted and proposes future research questions that can advance our understanding of artificial empathy.

Assiouras, I., Laserer, C., und Buhalis, D. (2025): The evolution of artificial empathy in the hospitality metaverse era, in: International Journal of Hospitality Management, Vol.126, 104063, doi: https://doi.org/10.1016/j.iihm.2024.104063, [12.12.2024].

Ranking: JIF: 10.0; SJR: 2.923

# Open-World Games' Affordance of Cognitive Escapism, Relaxation, and Mental Well-Being Among Postgraduate Students: Mixed Methods Study

Background: Open-world games, characterized by their expansive and interactive environments, may offer unique cognitive escapism opportunities, potentially leading to relaxation and enhanced well-being. These games, such as "The Legend of Zelda: Breath of the Wild" and "The Legend of Zelda: Tears of the Kingdom," allow players to experience a sense of freedom and autonomy, which can reduce stress and improve mental health. While previous research has examined the general impact of video games on mental well-being, specific studies on the effects of open-world games among postgraduate students are limited.

Objective: This study aims to investigate the relationships between cognitive escapism provided by open-world games and their effects on relaxation and well-being. The goal was to understand how the immersive nature of these games contributes to stress reduction and overall mental health improvement among postgraduate students.

Methods: A mixed methods approach was used, which involved in-depth exploratory qualitative interviews and a survey of 609 players of popular open-world games. Quantitative data were collected using standardized questionnaires to measure open-world games' affordance of cognitive escapism, relaxation, and well-being. Qualitative data were obtained through 32 in-depth interviews that explored players' experiences and perceptions of cognitive escapism, relaxation, and mental well-being. Results: Qualitative data (n=32; n=15, 47% female; n=16, 50% male; n=1, 3% preferred not to disclose gender; mean age 23.19, SD 2.19 y) revealed that cognitive escapism through immersive game worlds allowed players to temporarily disconnect from real-world stressors, resulting in enhanced mood and psychological well-being. Players indicated that the nonlinear gameplay and freedom to explore interactive environments provided a sense of relaxation and mental rejuvenation. Quantitative analysis (N=609) showed a substantial mediating role of relaxation in the relationship between cognitive escapism offered by open-world games and well-being. Specifically, cognitive escapism had a significant positive effect on players' relaxation ( $\beta$ =.15; SE 0.04; P<.001; 95% CI 0.0695-0.2331), which in turn had a significant and positive effect on players' well-being scores ( $\beta$ =.12; SE 0.04; P=.002; 95% CI 0.0445-0.2032).

Conclusions: The study demonstrates that open-world games offer substantial benefits for cognitive escapism, significantly improving relaxation and well-being among postgraduate students. The immersive and autonomous nature of these games is crucial in reducing stress and enhancing mental health. Future research may investigate the long-term effects of regular engagement with open-world games and explore their potential therapeutic applications for managing stress and anxiety.

Anto, A.; Basu A.; Selim, R.; Foscht, T.; Eisingerich, A. B. (2024): Open-World Games' Affordance of Cognitive Escapism, Relaxation, and Mental Well-Being Among Postgraduate Students: Mixed Methods Study, in: Journal of Medical Internet Research, Vol 26, doi:10.2196/63760

Ranking: JIF: 5.8, CiteScore: 14.4

# Effects of Large Language Model-Based Offerings on the Well-Being of Students: Qualitative Study

Background: In recent years, the adoption of large language model (LLM) applications, such as ChatGPT, has seen a significant surge, particularly among students. These artificial intelligence—driven tools offer unprecedented access to information and conversational assistance, which is reshaping the way students engage with academic content and manage the learning process. Despite the growing prevalence of LLMs and reliance on these technologies, there remains a notable gap in qualitative in-depth research examining the emotional and psychological effects of LLMs on users' mental well-being.

Objective: In order to address these emerging and critical issues, this study explores the role of LLM-based offerings, such as ChatGPT, in students' lives, namely, how postgraduate students use such offerings and how they make students feel, and examines the impact on students' well-being. Methods: To address the aims of this study, we employed an exploratory approach, using in-depth, semistructured, qualitative, face-to-face interviews with 23 users (13 female and 10 male users; mean age 23 years, SD 1.55 years) of ChatGPT-4o, who were also university students at the time (inclusion criteria). Interviewees were invited to reflect upon how they use ChatGPT, how it makes them feel, and how it may influence their lives.

Results: The current findings from the exploratory qualitative interviews showed that users appreciate the functional support (8/23, 35%), escapism (8/23, 35%), and fantasy fulfillment (7/23, 30%) they receive from LLM-based offerings, such as ChatGPT, but at the same time, such usage is seen as a "double-edged sword," with respondents indicating anxiety (8/23, 35%), dependence (11/23, 48%), concerns about deskilling (12/23, 52%), and angst or pessimism about the future (11/23, 48%). Conclusions: This study employed exploratory in-depth interviews to examine how the usage of LLM-based offerings, such as ChatGPT, makes users feel and assess the effects of using LLM-based offerings on mental well-being. The findings of this study show that students used ChatGPT to make their lives easier and felt a sense of cognitive escapism and even fantasy fulfillment, but this came at the cost of feeling anxious and pessimistic about the future.

Selim, R.; Basu, A.; Anto, A.; Foscht, Th.; Eisingerich, A. (2024), Effects of Large Language Model–Based Offerings on the Well-Being of Students: Qualitative Study, in: Journal of Medical Internet Research, Vol 8

Ranking: JIF: 5.8; CiteScore: 14.4

### Just Give Me A Reason: How goal setting increases the number of blood donations

In general, there is a positive attitude towards blood donation but only a very small percentage of the population are eligible to donate blood actually does. Based on ability-opportunity-motivation theory and goal-setting theory, we espouse that asking potential donors to commit to a donation goal in the form of a specific reason for donating blood increases donation frequency.

In an online experiment with a sample of 168 respondents conducted in Austria, different donation goals were developed based on medical data and tested. As a result, we were able to show that asking people to "just" donate, which is currently the standard communication approach of many blood donation organizations, if applied to 100 potential donors would result in 98 blood donations. However, motivating blood donors to reach a goal that requires multiple blood donations more than doubles the number of blood donations over the course of a year. If we think one step further and have potential blood donors select the most appropriate donation goal for them based on the effectiveness, this will triple the amount of blood donated compared to "just donate blood again".

The goal of blood donor organizations should therefore be to use appropriate communication measures to encourage potential blood donors to commit to a blood donation goal that suits them best. This could then motivate them to donate blood more frequently, which would increase the amount of blood donated and secure a continuous supply of much-needed blood.

Schloffer, J.; Foscht, Th.; Wu, L.; Maloles, Cesar (2024): Just Give Me A Reason: Ho goal ssetting increases the number of blood donations, in: Asia Pacific Journal of Health Management, Vol 19 No. 2

Ranking: N/A

# Is there a danger of making customers feel too empowered? Exploring the double-edged sword of customer orientation and creative benefits

Purpose This study aims to explore the extent to which customer orientation and creative benefits offered by a firm may weaken rather than strengthen customer engagement. In doing so, it sheds new light on how customer orientation and creative benefits may facilitate rather than hinder engagement by customers. Design/methodology/approach A field study provides a test of the proposed effects in a hedonic consumption setting with 1,703 customers of an online dating service. Furthermore, an experimental study with 277 executives in a functional consumption setting (new mobile app) helps affirm the robustness of the field study findings. Findings This research theorizes and examines how communal relationship norms between customers and a firm, along with customers' psychological empowerment, mediate the effect of customer orientation and creative benefits on customer engagement. A provocative finding of the study is that communal relationship norms help boost, whereas psychological empowerment reduces, the effects of both customer orientation and creative benefits on customer engagement. Research limitations/implications The research examines different relationship norms and how they can become integral to customer-company relationships; this perspective helps reveal the underlying dynamics. It contributes to the literature on customer engagement by theorizing and demonstrating the link between customer orientation and customer engagement, two central constructs in the marketing literature. It theorizes and demonstrates that providing creative benefits brings about a direct competitive advantage for the product itself, and acts as a significant variable that explains the company-customer relationship. Practical implications The findings highlight the advantages and challenges associated with encouraging customer engagement. First, they suggest that companies emphasize their customer orientation and creative benefits. Second, managers should try to minimize the possible process of raising customers' psychological empowerment while maximizing the impact of communal relationship norms. Originality/value This study identifies psychological empowerment as a key reason customer-oriented companies that provide creative benefits still struggle to engage their customers. It also suggests viable tactics to overcome barriers to enhanced customer engagement, such as by minimizing the effects of customers' psychological empowerment while maximizing the impact of their perceived communal relationship norms.

Liu, Y.; Mayerhofer, H.; Marchand, A.; Eisingerich, A. B.. (2024): Is there a danger of making customers feel too empowered? Exploring the double-edged sword of customer orientation and creative benefits, in: European Journal of Marketing, 58 (1), DOI: 10.1108/EJM-12-2021-0925

Ranking: JIF: 3.7; CiteScore: 6.9

# **Operations und Information Systems**

#### Investigating the research output of institutions

Describing, analyzing, and evaluating research institutions are among the main tasks of scientometrics and research evaluation. But how can we optimally search for an institution's research output? Possible search arguments include institution names, affiliations, addresses, and affiliated authors' names. Prerequisites of these search tasks are complete lists (or at least good approximations) of the institutions' publications, and—in later steps—their citations, and topics. When searching for the publications of research institutions in an information service, there are two options, namely (1) searching directly for the name of the institution and (2) searching for all authors affiliated with the institution in a defined time interval. Which strategy is more effective? More specifically, do informetric indicators such as recall and precision, search recall and search precision, and relative visibility change depending on the search strategy? What are the reasons for differences? To illustrate our approach, we conducted an illustrative study on two information science institutions and identified all staff members. The search was performed using the Web of Science Core Collection (WoS CC). As a performance indicator, applying fractional counting and considering co-affiliations of authors, we used the institution's relative visibility in an information service. We also calculated two variants of recall and precision at the institution level, namely search recall and search precision as informetric measures of performance differences between different search strategies (here: author search versus institution search) on the same information service (here: WoS CC) and recall and precision in relation to the complete set of an institution's publications. For all our calculations, there is a clear result: Searches for affiliated authors outperform searches for institutions in WoS. However, especially for large institutions it is difficult to determine all the staff members in the time interval of research. Additionally, information services (including WoS) are incomplete and there are variants for the names of

institutions in the services. Therefore, searching for institutions and the publication-based quantitative evaluation of institutions are very critical issues.

Stock, W.G./ Reichmann, G./Schlögl, C.: Investigating the research output of institutions, in: Journal of Informetrics 19(2). 2025. 1-14. doi: https://doi.org/10.1016/j.joi.2025.101638

Ranking: WOS-IF: 3,4

## Integrating multiple sources of ordinal information in portfolio optimization

In this contribution we consider multiple qualitative views specified as total orders of the expected asset returns and discuss two different approaches for incorporating this input in a mean–variance portfolio optimization model. In the robust optimization approach we first compute a posterior expectation of asset returns for every given total order by an extension of the Black–Litterman (BL) framework. Then these expected asset returns are considered as possible input scenarios for robust optimization variants of the mean–variance portfolio model (max–min robustness, min-max regret robustness and soft robustness). In the order aggregation approach rules from social choice theory (Borda, Footrule, Copeland, Best-of-k and MC4) are used to aggregate the individual total orders into a single "consensus total order". Then expected asset returns are computed for this "consensus total order" by the extended BL framework mentioned above. Finally, these expectations are used as an input of the classical mean–variance optimization. Using data from EUROSTOXX 50 and S&P 100 we empirically compare the success of the two approaches in the context of portfolio performance analysis and observe that aggregating orders by social choice methods mostly outperforms robust optimization based methods for both data sets and for different combinations of confidence and quality levels of the views.

E. Cela, S. Hafner, R. Mestel, U. Pferschy, Integrating multiple sources of ordinal information in portfolio optimization, Annals of Operations Research (2025). https://doi.org/10.1007/s10479-025-06495-x

Ranking: Impact factor: 4.4, SJR: 1.019 SNIP: 1.396 CiteScore: 7.9

## WZ Volkswirtschaft

## Rank information and inequality in social welfare functions

In this paper we use rank information to construct a measure of preference satisfaction by collective decision rules and to compare the Borda rule with the plurality rule with respect to the inequality their outcome induces. While the construction of our measure of preference satisfaction is formally equivalent to Borda utilities, it turns out that, with respect to equality, the Borda rule is not necessarily superior to plurality rule for the case of more than three alternatives.

Darmann, A., D. Eckert, C. Klamler, C. (2025), Rank information and inequality in social welfare functions, Theory and Decision 98, forthcoming. https://doi.org/10.1007/s11238-025-10023-5

Ranking: EF = 64; JIF = 0.9; SJR = 0.5

## Institution formation in weakest-link games

We study the role of endogenous formation of institutions in overcoming coordination failures in weakest-link games with fixed neighborhoods. In our setting, institutions are weak and only form and make decisions by unanimity. Experimental results show that such institutions are formed and mitigate the coordination problem, raising equilibrium provision levels, but falling short of providing Pareto-optimal contributions. Given the multiplicity of Nash equilibria in weakest-link games, we consider several equilibrium refinements that allow for (small) errors by individuals. Without institutions, risk dominance and the Quantal Response Equilibrium (QRE) with (almost) perfectly rational agents select the worst equilibrium, while all equilibria are trembling-hand perfect and proper. With the possibility of forming an institution, all these concepts predict the Pareto-optimal equilibrium as the unique outcome. As we do not observe this outcome in our experimental results, only the Agent QRE model with bounded rationality can explain our data.

Alejandro Caparr\'{o}s, E. Blanco, M. Finus (2025), Institution formation in weakest-link games, Journal of Economic Behavior and Organization 233, 106943. https://doi.org/10.1016/j.jebo.2025.106943

Ranking: EF = 90; JIF = 2.3; SJR = 1.33

## Zentrum für Entrepreneurship und angewandte Betriebswirtschaftslehre

### The impact of institutional autonomy on higher education institutions in Europe

This paper aims to evaluate the effect of institutional autonomy on higher education institutions (HEIs). The research question is whether increasing institutional autonomy leads to HEIs fulfilling three major missions with greater success. This study utilizes multiple sets of regression models, including multilevel hierarchical models, combining data from four sources for European HEIs, which includes variables on a state and institutional level. The three sets of regression models each estimate the effect of HEIs' autonomy on their success in one of their missions. Although results indicate a good model fit, the effects of increasing HEI autonomy on the mission objectives appear mostly minor and even, in some cases, negative and therefore contradictory to the autonomy literature. A possible theoretical explanation question whether recent developments actually create additional autonomy or only shift autonomy among HEI actors without quantitative impact. A methodological explanation aims to stimulate further improvements and standardization of measurements.

Patrick Wilhelm Painsi, Robert Rybnicek, Karl-Heinz Leitner, The impact of institutional autonomy on higher education institutions in Europe, in: Science and Public Policy

Ranking: JIF: 2.6, SJR: 0.823, EF: 0.002, H: 80

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