Meta-Analytic Generalizations in Marketing

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Meta-Analytic Generalizations in Marketing

Session Chair:

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Papers:

- Georgia Liadeli (presenter), Francesca Sotgiu, and Peeter Verlegh: The Owned Social Media Value Chain: A Meta-Analysis on the Chain of Effects from Brand Owned Social Media to Consumer Buying Behavior.
- Kristina Viets (presenter) and Franziska Völckner: A Meta-Analysis on the Influence of Green Attitudes on Green Consumer Responses.
- Alexander Edeling (presenter), Inês Ferraz Teixeira, Alexander Mafael, and Yves Van Vaerenbergh: Which Marketing Event has the Largest Firm Value Impact? A meta-Analysis.
- Chenming Peng (presenter), Tammo Bijmolt, and Franziska Völckner: The Impact of Marketing Crises on Firm Value: A Meta-Analysis.

Declaration:

Each presenter has agreed to register for the conference and to present the paper; and none of the papers has been submitted to other conference tracks, and none has been presented previously at EMAC.

Abstract

Empirical generalizations by means of meta-analysis methods allow for an efficient and systematic dissemination of scientific knowledge. Typically, a meta-analytic review provides a novel conceptual framework, a concise overview regarding the state-of-knowledge about a topic, and directions for further research. The objective of this special session is to bring together researchers interested in conducting meta-analysis for empirical generalizations and researchers interested in the results of recent studies providing such generalizations on important marketing phenomena.

This special session includes the following presentations (first authors presenting):

Liadeli, Sotgiu, and Verlegh: The Owned Social Media Value Chain: A Meta-Analysis on the Chain of Effects from Brand Owned Social Media to Consumer Buying Behavior.

This meta-analysis analyzes the impact of owned social media on consumer buying behavior via social media engagement, earned social media, and brand associations. We find that the average correlation between owned social media and social media engagement is .295, earned social media is .363, brand association is .363, and consumer buying behavior is .270. The results indicate that owned social media affects social media engagement and earned social media (reach), and together they influence brand associations (memory), which is the primary driver of consumer buying behavior.

Viets and Völckner: A Meta-Analysis on the Influence of Green Attitudes on Green Consumer Responses.

This meta-analysis addresses the questions to what extent and under which conditions green attitudes translate into green consumer responses. Based on the theory of planned behavior, we derive a conceptual framework of theoretical factors that may affect this attitude-consumer response relationship. The findings show a small and significantly positive association between green attitudes and green consumer responses ($\bar{r}$=.271). The size of this relationship depends more strongly on "consumer response characteristics," "attitude characteristics," and "sources of subjective norms" than on "influences on perceived behavioral control."

Edeling, Ferraz Teixeira, Mafael, and Van Vaerenbergh: Which Marketing Event has the Largest Firm Value Impact? A Meta-Analysis.

This meta-analysis addresses the following research questions: (1) What is the overall impact of marketing events on firm value?; (2) Do different types of marketing events have different effects on firm value?; (3) What explains the heterogeneity in the impact of types of marketing events on firm value? Preliminary results show the following: (1) The mean

ACAAR across all marketing events is .906%; (2) firm value changes are strongest for new product development and partnership events and weakest for communication and customer events; (3) investor responses are stronger for business-to-business and manufacturing firms.

Peng, Bijmolt, and Völckner: The Impact of Marketing Crises on Firm Value: A Meta-Analysis.

We conducted a meta-analysis to synthesize the literature on marketing crises effects on firm value. We integrate a large number of effect sizes from the fields of marketing, finance, and supply chain management. The findings answer the following questions: (1) Whether and to what extent does a marketing crisis in a firm influence its stock return? (2) What is the impact of factors related to the crisis, the firm, and the market on the effect of a marketing crisis on stock market responses?

The Owned Social Media Value Chain: A Meta-Analysis on the Chain of Effects from Brand Owned Social Media to Consumer Buying Behavior

Georgia Liadeli (Vrije Universiteit Amsterdam, The Netherlands; presenter)
Francesca Sotgiu (Vrije Universiteit Amsterdam, The Netherlands)
Peeter Verlegh (Vrije Universiteit Amsterdam, The Netherlands)

What is the chain of effects set in motion by a brand's owned social media? In this meta-analysis we propose the "owned social media value chain" as a framework, analyzing the impact of owned social media on consumer buying behavior via social media engagement, earned social media, and brand associations. The framework reconciles conflicting results in previous research across 142 papers covering 21 platforms, 31 industries, and 34 countries. We find that the average correlation between owned social media and social media engagement is .295, earned social media is .363, brand association is .363, and consumer buying behavior is .270. More importantly, the results suggest that the impact of owned social media on consumer buying behavior is established only through chain effects. Owned social media affects social media engagement and earned social media (reach), and together they influence brand associations (memory), which is the primary driver of consumer buying behavior.

We aim to contribute to the literature in several ways: First, we go beyond existing reviews that tally and compare the effects of owned social media and propose a chain of effects framework that highlights the cascade of effects set in motion by brands' owned social media, acting through two key constructs, reach and memory. Having a clear picture of the direct and indirect effects along this chain enables academics and practitioners to better estimate the desired marketing outcome. Second, in doing so, we confirm the central role of brand associations at the core of the chain of effects, thus highlighting the role of social media as a branding instrument. While traditional marketing literature has emphasized the central role of brand associations work in social media marketing has paid little attention to the activation of brand associations. Yet, brand managers and social media managers seem to use social media primarily to "build brands" by creating and reinforcing favorable brand associations. Third, while it has been long established that earned social media positively affects consumer buying behavior, brand managers question how they can stimulate earned social media. We not only summarize the effects across a large body of literature, but by analyzing the chain of effects, we also show links that have hitherto been unexplored. These analyses confirm that owned social media can be an effective tool for managers seeking to stimulate earned social media and consequently consumer buying behavior. Finally, as brands operate across different social media platforms, we analyze whether the effects vary across social networks, microblogs, and blogs, forums, and brand communities. We find that while owned social media has a similar impact on earned social media across all platforms, the impact of owned social media, earned social media, and brand associations on consumer buying behavior varies substantially from one platform to the other.

A Meta-Analysis on the Influence of Green Attitudes on Green Consumer Responses

Kristina Viets (University of Cologne, Germany; presenter)
Franziska Völckner (University of Cologne, Germany)

Although consumers know that green consumption plays a critical role in fostering long-term environmental sustainability and limiting the impacts of global climate change, pollution, and environmental degradation, the academic literature consistently emphasizes that many consumers do not act accordingly. This attitude-behavior gap is one of the key challenges for managers and public policymakers aiming to promote sustainable behaviors (White, Habib, and Hardisty, 2019). Accordingly, a large group of empirical studies on green consumption have examined the relationship between green attitudes and green consumer responses. However, findings on the effect of green attitudes on green consumer responses are mixed. Some studies found large and positive effects of green attitudes on green consumer responses (Haws, Winterich, and Naylor, 2014; Mostafa, 2007), while other studies found a negative relationship between green attitudes and green consumer responses (Alwitt & Pitts, 1996; Andersson & Borgstede, 2010), or insignificant effects (Alwitt & Pitts, 1996; Chan, 2001). These mixed findings suggest that the effects of green attitudes on green consumer responses are contingent on contextual factors and research method factors.

Against this background, we aim to delve into the question to what extent and under which conditions attitudes translate into behavior in the domain of green consumption and synthesize the corresponding literature. Specifically, we conduct a meta-analysis on the large body of research examining the influence of green attitudes on green consumer responses. Based on the theory of planned behavior (Ajzen, 1991), we develop a conceptual framework of four groups of theoretical factors—attitude characteristics, consumer response characteristics, sources of subjective norms, influences on perceived behavioral control—that may affect the relationship between green attitudes and green consumer responses, in addition to methodological factors. Our meta-analytic findings are based on 774 effect sizes from 294 studies, comprising 231,687 consumers over the 1981–2023 period.

This work makes three contributions to the literature. First, we develop new empirical generalizations on the magnitude of the relationship between attitudes and behavior in green consumption, considering a broad range of green consumer responses as well as behavioral intentions and self-reported or actual behaviors. Second, we provide a comprehensive understanding of the moderators of the relationship between green attitudes and green consumer responses. Knowing the factors that strengthen or weaken the attitude-behavior relationship is essential for managers and public policymakers who aim to encourage consumers to adopt sustainable behaviors. Third, we aim to develop a future research agenda based on the findings of this meta-analysis.

We find a small (Cohen, 1992) and significantly positive association between green attitudes and green consumer responses ($\bar{r}$ =.271, CI_{95} = [.251, .290]), indicating that the translation of attitudes into behavior in green consumption is indeed relatively weak. In addition, a multilevel meta-regression reveals that the size of the attitude-response relationship depends more strongly on "consumer response characteristics," "attitude characteristics," and "sources of subjective norms" than on "influences on perceived behavioral control." More specifically, the results show that the translation of green attitudes into green consumer responses is weaker when the response represents self-reported or actual behavior, the attitude includes cognitive elements, and when social norms are enforced through social presence and sustainability norm instructions, but stronger when the attitude includes affective elements. We will present the results in greater detail during the special session.

Keywords: green consumption, green attitudes, attitude-behavior gap, meta-analysis

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Which Marketing Event has the Largest Firm Value Impact? A Meta-Analysis

Alexander Edeling (KU Leuven, Belgium; presenter)
Inês Ferraz Teixeira (KU Leuven, Belgium)
Alexander Mafael (Stockholm School of Economics, Sweden)
Yves Van Vaerenbergh (KU Leuven, Belgium)

Despite the fact that marketing accountability has lingered in both practice and finance for about 20 years, the pressure to prove the value relevance of marketing remains on top of chief marketing officers' (CMO) agenda. One problem faced by managers is how to deal with the broad variety of marketing events, ranging from new product introductions and marketing alliance announcements to negative publicity with celebrity endorsers. For each event type, some generalizable results exist. For example, research has shown that investors regard the development phase within the product innovation process as more crucial than the commercialization phase (Sood and Tellis, 2007). These detailed insights are important but do not provide an answer to the question of which marketing events managers (and investors/analysts) should focus on. Another unresolved issue concerns the question of how managers should deal with negative compared to positive marketing news. Prospect theory

(Kahnemann and Tversky, 1979) suggests that “losses loom larger than” gains, but is this also valid for the marketing event case?

Leading marketing-finance researchers have themselves recognized the dominance of the event-study methodology for investigating (at least partially) causal shareholder-value effects of marketing. In their recent review article on event studies in the marketing literature, Sorescu et al. (2017, p. 187) state that “most of what we know about the effect of marketing on firm value comes from event studies”. So far, there have been six review articles on the marketing-finance interface, of which three are quantitative (meta-analyses) and three are qualitative. The study by Edeling and Fischer (2016) has so far been the broadest quantitative review. Their meta-analysis on the impact of various continuous marketing action, asset, and capability metrics offers meaningful generalizations for the understanding of the marketing value chain. However, the authors explicitly exclude event studies from their meta-analysis. The most recent work by Sorescu et al. (2017) qualitatively reviews the application and findings of event studies in the marketing literature. Besides describing the methodology and design of event studies in detail and outlining strengths and weaknesses of event studies in comparison to other methods, they summarize findings of existent event studies in the marketing field.

Nonetheless, to date, marketing research has not provided a quantitative synthesis in the form of a meta-analysis on how different marketing event types (e.g., new product innovations, alliances) affect investor response. Unlike qualitative reviews, meta-analyses help establish the “truths” regarding event studies that refine our theory and trigger further empirical efforts (Grewal et al. 2018). The present meta-analysis fills this void and helps provide answers to the following research questions that the two most related works by Edeling and Fischer (2016) and Sorescu et al. (2017) leave open: (1) What is the overall impact of marketing events on firm value?; (2) Do different types of marketing events have different effects on firm value?; (3) What explains the heterogeneity in the impact of types of marketing events on firm value?.

This study introduces the absolute cumulative average abnormal return (ACAAR) as the most appropriate effect size for such a meta-analysis that integrates events with both a positive and a negative stock market signal. Preliminary results from a sample of 559 ACAARs across 151 studies conducted between 1985 and 2018 unveil the following new empirical generalizations: (1) The mean ACAAR across all marketing events is .906%, implying a substantial general investor reaction; (2) firm value changes are strongest for new product development and partnership events and weakest for communication and customer events; (3) moderator analyses show that investor responses are stronger for business-to-business and manufacturing firms compared to business-to-consumer and services firms, respectively. Interestingly, there is no significant difference in investor response towards clearly positive versus clearly negative marketing events, implying that prospect-theory-like effects do not seem to prevail in this context. Methodologically, the initial findings show that results are irresponsive to the chosen abnormal return model and the elimination of confounded events.

The data collection process for studies conducted between 2018 and 2023 is still ongoing and the final results of this study will be presented at the conference.

Keywords: event study, marketing event, marketing action, marketing asset, marketing capability, meta-analysis, hierarchical linear model

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The Impact of Marketing Crises on Firm Value: A Meta-Analysis

Chenming Peng (University of International Business and Economics, China; presenter)
Tammo Bijmolt (University of Groningen, The Netherlands)
Franziska Völckner (University of Cologne, Germany)

Companies can face various marketing crises in the marketplace (Cleeren, Dekimpe, Van Heerde, 2017; Dinner, Kushwaha, and Steenkamp, 2019). A well-known example is the

Samsung Galaxy Note 7, which had serious battery overheating issues, causing damage to consumers and leading to large-scale product recalls. Another example is the sex scandal involving Tiger Woods, which not only damaged his own career, but also the reputation of his sponsor firms. These crises publicly communicate negative information about firms to investors and might negatively influence firm value.

In the scientific literature, numerous studies from different disciplines have examined the financial consequences of a wide range of crises types in different settings and with mixed results, typically using event study methodology (Sorescu, Warren, and Ertekin, 2017). Therefore, we conducted a meta-analysis to address the mixed empirical findings and to synthesize the literature on marketing crises. Specifically, we conducted a thorough search for empirical studies, including a keyword search in electronic databases (e.g., Web of Science and Google Scholar), a review of major marketing journals with published articles on marketing crises, and reference checks. We then selected those papers that examined the impact of marketing crises on stock returns using event studies and provided sufficient statistical information on the effect sizes, namely CAAR (cumulative average abnormal return). Our meta-analysis integrates a large number of effect sizes from the fields of marketing, finance, and supply chain management during the period of 1985-2022. The findings answer the following questions: (1) Whether and to what extent does a marketing crisis in a firm influence its stock return? (2) What is the impact of factors related to the crisis, the firm, and the market on the effect of a marketing crisis on stock market responses?

Keywords: marketing crisis, firm value, meta-analysis, event study

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