

Should Studies from Predatory Marketing Journals be Included in a Meta-Analysis? Some Guidelines for Meta-Analysts

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Meta-analysis has become increasingly popular in marketing to quantitatively integrate research findings across many studies. In the euphoria of meta-analyses, meta-analysts may inadvertently include studies published in predatory journals, and these studies will be integrated in effect size estimates and influence findings, recommendations, and, eventually, marketing theory and practice. The purpose of this paper is to raise awareness among marketing meta-analysts regarding predatory journals. It provides evidence that nine meta-analyses (six of which were published in 2021 and 2022) comprised studies from articles published in three predatory marketing journals. The fundamental contribution of this study, however, is to provide guidelines for meta-analysts regarding studies published in predatory journals.

Keywords: Meta-analysis; Predatory Journals; Inclusion; Integrity; Marketing Knowledge.

Introduction

A meta-analysis is a “quantitative method that integrates the results of empirical studies to provide an aggregate summary of findings in a research domain” (Paul and Barari, 2022, p.1100). It is often depicted as a useful methodological tool to “identify the expanding boundaries of a research domain by summarizing current knowledge and important unresolved conceptual, methodological, and substantive issues” (Grewal, Puccinelli, and Monroe, 2018, p.9). To fulfill its promises and be useful, a meta-analysis should include studies that appeared in peer-reviewed journal articles or, to avoid publication bias, reliable unpublished studies (Grewal et al., 2018, pp.21-22). But should a meta-analysis include studies published in predatory journals?

Predatory journals are “entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial/publication practices, lack of transparency, and/or use of aggressive and indiscriminate solicitation practices” (Grudniewicz et al., 2019, p.211). They “are money-making stations characterized by charging publication fees and an absence of ‘true’ peer review” (Memon, 2018, p.146). Predatory journals endanger the credibility and integrity of any scientific field. “By faking or neglecting peer review, they pollute the scholarly record with fringe or junk science” (Beall, 2016, p.326). For the Committee on Publication Ethics (COPE), “the main hallmark of predatory publishing is simply that there is no or minimal quality control over the scholarly material in the publications” (COPE, 2019, p.5). Predatory publishers, the COPE states, “are either silent about peer review or make false claims that the journal is peer-reviewed” (COPE, 2019, p. 5).

The meta-analytic approach has attracted tremendous attention from marketing scholars (Grewal et al., 2018; İpek and Bıçakcıoğlu-Peynirci, 2021). However, no published paper has looked into the issue of the predatory journal articles captured in marketing meta-analyses. This paper fills that void. It is intended to: (a) attract attention to the issue of predatory journals; (b) provide evidence that some meta-analyses have included studies from predatory journal articles; and (c) offer some guidelines for meta-analysts.

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Mass Production of Meta-Analyses in Marketing

The origin of meta-analysis can be traced back to the early 1900s, with “the first attempt at combining correlation coefficients reported in 11 studies by Karl Pearson in 1904” (İpek and Bıçakcıoğlu-Peynirci, 2021, p.130). The term “meta-analysis” was coined by Gene V. Glass, in 1976, to refer to “the statistical analysis of a large collection of analysis results from individual studies for the purpose of integrating the findings” (Glass, 1976, p.3). Articles using/about meta-analysis and published in marketing followed soon after, with Churchill and Peter’s (1984) *Journal of Marketing Research* paper being the first to employ meta-analysis.

During the last decade, meta-analysis has grown in popularity disproportionately in marketing and its various sub-fields (Grewal et al. 2018; İpek and Bıçakcıoğlu-Peynirci, 2021). The popularity of meta-analysis has grown to the point where some researchers have conducted second-order meta-analyses (or meta-analyses of meta-analyses) (e.g., Eisend, 2015; Eisend and Tarrahi, 2016). According to Elsevier’s Scopus, there have been 153 meta-analyses published in journals with the word “marketing” in their titles as of 20 June 2022 (see Figure 1). 53 (or 34.64%) of these meta-analyses were published between 2020 and 20 June 2022. As shown in Figure 1, there were 22 meta-analyses published in Scopus-indexed marketing journals in 2020 alone. Given this, it is probably safe to argue that meta-analyses are being mass-produced in marketing.

Figure 1: Evolution of the Number of Meta-Analyses Published in Scopus-indexed Marketing Journals

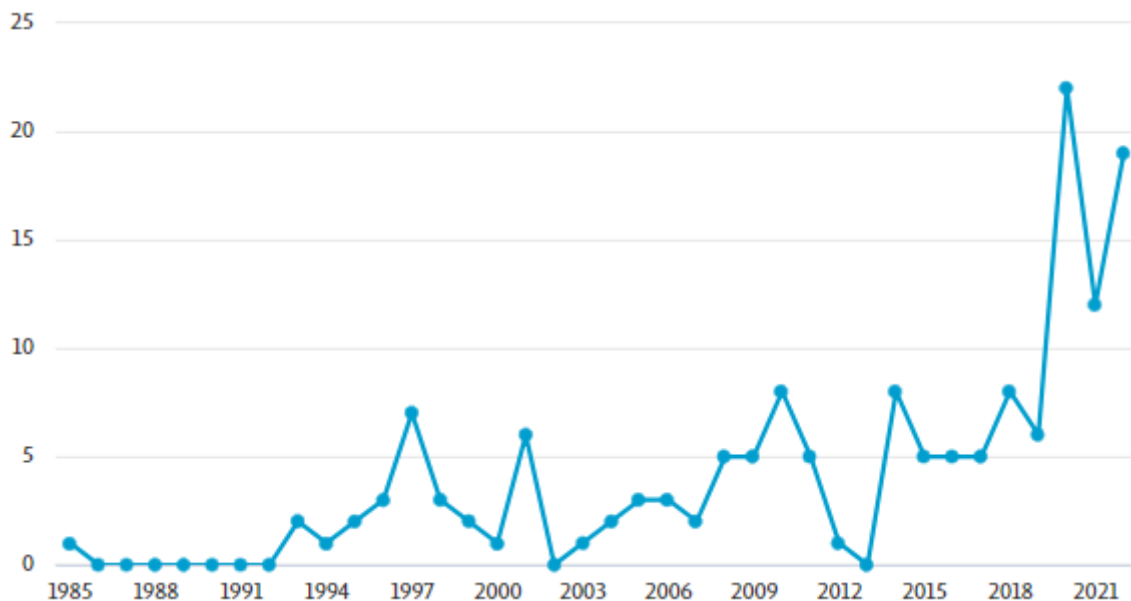
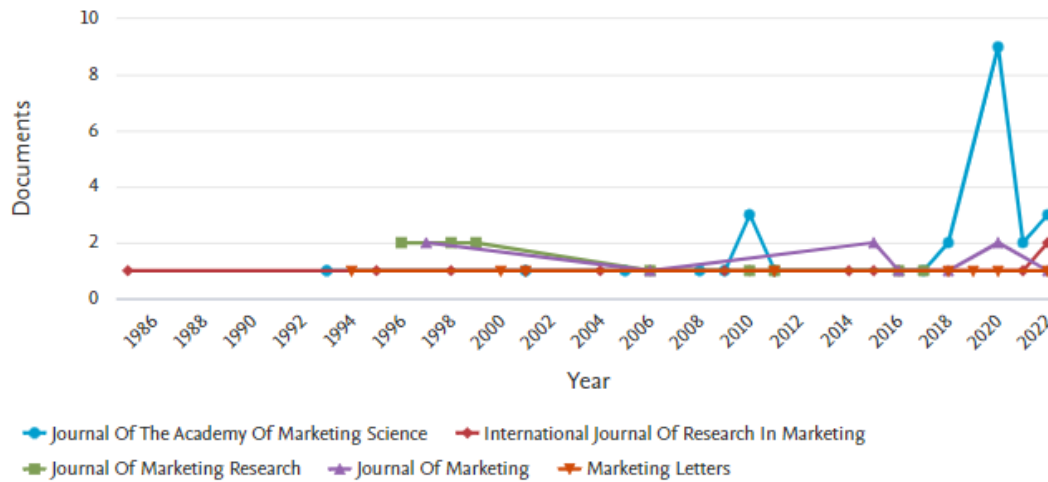


Figure 2 depicts the top-five marketing journals in terms of the number of published meta-analyses. They are, in order, the *Journal of the Academy of Marketing Science* ([JAMS] with 26 meta-analyses), the *International Journal of Research in Marketing* (with 15), the *Journal of Marketing Research* (with 11), the *Journal of Marketing* (with 10), and *Marketing Letters* ([ML] with eight). The JAMS published nine meta-analyses in 2020 alone, seven of which appeared in a special issue on “Generalization in Marketing: Systematic reviews and meta-analyses” (see Hulland and Houston, 2020).

Figure 2: The Top-Five Scopus-indexed Marketing Journals that Published the Largest Number of Meta-Analyses



Meta-analyses appear to be mushrooming in marketing. This increase in meta-analyses could be attributed to several factors: (1) meta-analyses are publishable in “elite” marketing journals (see Figure 2); (2) they can be done for little or no money; (3) they can be easily performed using meta-analytic software (such as Comprehensive Meta-Analysis) and packages (like the R packages psychmeta and metaphor); and (4) the abundance of book chapters and journal articles that extol the virtues of meta-analyses in marketing (see e.g., Hulland and Houston, 2020, Grewal et al., 2018; İpek and Bıçakcıoğlu-Peynirci, 2021; Lehmann, 2018; Paul and Barari, 2022).

Extant Guidelines on the Conduct of Meta-Analyses are Silent about Predatory Journals

Guidelines for the conduct of a meta-analysis in marketing abound. They could be found in several book chapters (e.g., İpek and Bıçakcıoğlu-Peynirci, 2021; Lehmann 2018) and journal articles (e.g., Grewal et al. 2018; Paul and Barari 2022). However, none of these have discussed or even mentioned the issue of predatory journals. For instance, neither the book chapter by Lehmann (2018, pp.305-323) nor the one by İpek and Bıçakcıoğlu-Peynirci’s (2021, pp.128-144) mention predatory publishing. The flow chart and the guidelines provided in the article by Grewal et al. (2018) did not address the problem of predatory journals. Even the more recent article by Paul and Barari (2022) is silent about studies published in predatory journals. The question that arises then is: Are the authors of these guidelines unaware of the existence of predatory journals?

Predatory (Marketing) Journals: Are They a Threat?

Jeffrey Beall, an academic librarian at the University of Colorado in Denver (US), published a list of “potential, possible, or probable predatory” journals and publishers on his blog in 2010. He coined the expression “predatory publishing” to describe entities that:

[P]ublish counterfeit journals to exploit the open-access model in which the author pays. These predatory publishers are dishonest and lack transparency. They aim to dupe researchers, especially those inexperienced in scholarly communication (Beall, 2012, p. 179).

Beall’s list was controversial, and it was roundly condemned by questionable and/or predatory publishers. In February 2013, the Canadian Center of Science and Education (CCSE), a for-profit open-access (OA) publisher that now publishes 42 journals, including a marketing journal (i.e., The International Journal of Marketing Studies [IJMS]), sent

Beall a letter claiming defamation and libel for including its company on his list. The letter reportedly threatened Beall with “civil action” if he did not remove the company from his list (Flaherty, 2013). Following intense pressure from his employer (i.e., the University of Colorado) and various legal threats, Beall removed his list from his blog on January 15, 2017 (Strielkowski, 2017). Unsolicited or mass spam emails are sent by predatory publishers seeking applications for editor/reviewer positions and/or manuscript submissions (i.e. call-for-papers) (Memon, 2018b). The then-editor-in-chief of the IJMS invited the author of this paper to submit a manuscript and join the journal’s review board on two occasions (the first on 2 November 2011 and the second on 27 March 2013). On June 26, 2016, the author of this paper received an email from the editorial assistant of the IJMS urging him to submit his work by July 26, 2016, “so that it can be processed for publication in [that] journal’s future issue”. None of these three communications referenced the APC that must be paid. The verbatim of these three spam emails is available upon request.

Predatory journals are misleading. Some of them erroneously claim to be indexed in the Directory of Open Access Journals (DOAJ)—a community-curated online directory whose stated aim is to index and give access to high-quality, OA, peer-reviewed journals (<https://doaj.org/>)—and display the DOAJ logo on their websites (Moussa, 2021). Of course, the DOAJ has a list of these misleading journals². On that list, one can find a journal entitled the British Journal of Marketing Studies (BJMS). That “journal” boasts a certain Paul Simon as editor-in-chief and a certain James Sugar as associate editor. Probably the individual(s) behind that entity is a (are) rock and RnB fan(s). Though it is not indexed by Clarivate Analytics, the BJMS claims to have an “APS Impact Factor” of 6.80. To the best of the author’s knowledge, no such derivation of Clarivate’s Journal Impact Factor exists. That journal’s publisher (i.e., European-American journals) also publishes 81 other journals. This is a noteworthy feature, given that the publisher’s principal “contact address” is a small terraced house in Gillingham (in the United Kingdom). The Whois website (<https://www.whois.com/whois>)—which provides information about the registrar of an Internet domain name, its date of registration and expiration, its name server, and the registrant contact— indicates that the registrant contact of the Internet domain name used by that publisher is located in the United States. With a fake nationality/address, a forged impact factor, a fictitious editor-in-chief, and a false claim about its indexation, it is no coincidence then that the BJMS is included in Cabell’s Predatory Reports (Moussa and Linacre, 2020).

There have also been incidents of genuine journals being purchased by predatory publishers while retaining their former indexing status in journal quality lists and bibliographic databases. The Academy of Marketing Studies Journal (AMSJ) is one such publication. It is officially published by Allied Business Academies (ABA). In 2014, ABA was purchased by the (in)famous predatory publisher OMICS International³ (Linacre, Bisaccio and Earle, 2019). For 2,400 US dollars as APCs, the AMSJ promises prospective authors a “21 days rapid review process with international peer-review standards”. For 30% extra than regular APCs, the AMSJ offers an accelerated journal review for authors wishing to have their manuscripts “peer-reviewed” within 10 days⁴. The AMSJ claims a 30% acceptance rate. An examination of one of its most recent issues (i.e., issue four of volume 26) indicates that it has five articles written or co-written by the same researcher. This finding calls into question not only the accuracy of the reported acceptance rate, but also the existence of a peer-reviewing process for that publication venue. It also suggests that some authors are

² See https://docs.google.com/spreadsheets/d/1Y_Sza4rPDkf-NNX9kwiErGrKeNTM75md9B63A_gVpaQ/edit#gid50 (last accessed 29 June 2022).

³ See <https://www.emeraldcityjournal.com/2016/10/allied-academies-bad-business-decisions-misdirected-blame-and-a-new-name/> (last accessed 20 June 2022).

⁴ See <https://www.abacademies.org/submission-instructions.html> (last accessed 20 June 2022).

wittingly submitting several manuscripts to that journal knowing that they will be accepted because of the lack of a rigorous peer review procedure.

A predatory publisher may “appoint” an eminent/prolific scholar, without his/her knowledge or permission, as the editor-in-chief of one (or more) of its journals (Eriksson and Helgesson 2017). Back to the case of the AMSJ, on June 24 and July 26, 2022, the author contacted the two scholars listed as the current co-editors-in-chief asking if they actually oversee that publication outlet.⁵ The response was “No”. For readers’ information, the AMSJ was removed from Elsevier’s Scopus in 2016 owing to publication concerns, however, it is still ranked as a “B” journal in the Australian Business Deans Council’s (ABDC) Journal Quality List for 2019 (ABDC, 2019).

Because they neglect peer reviewing or make false claims that they are peer-reviewed, predatory journals are a threat to any scientific domain (Moussa, 2021). The author’s question here is: should studies published in these predatory marketing journals be included in a meta-analysis? Since earlier studies are used as the unit of observation in meta-analyses, any potential danger to the validity of that unit must be evaluated and critiqued (Rice et al., 2021). Because of predatory journals’ poor publishing practices, studies published in them may not adhere to reporting requirements, contain errors, or, in the worst-case scenario, be fraudulent (Munn et al., 2021).

Are There Meta-Analyses that Include Studies Published in Predatory Journals? Yes, They Exist.

Using Scopus’ advanced search feature and the search string in the notes in Table 1, the author has found 10 meta-analyses that cite articles published in the three abovementioned predatory marketing journals (i.e., IJMS, BJMS, and AMSJ). The author carefully examined each of the 10 meta-analyses to ensure that they included studies (i.e., effect sizes) from predatory journal articles rather than merely citing them. According to the meticulous examination, nine of these 10 meta-analyses included effect sizes from papers published in predatory journals. So, nine out of the 153 meta-analyses published in marketing journals thus far include studies from predatory journal articles. Three of these nine meta-analyses were published in 2022. Three more were published in 2021. These nine meta-analyses were published in seven marketing journals (including two of the top-five journals in terms of published meta-analyses). Table 1 below displays the nine meta-analyses, the seven publishing journals, the cited predatory marketing journal, and the number of studies from that predatory journal article. Table 1 also includes the number of citations received by each of these nine meta-analyses. The number of studies included in each meta-analysis ranged from 19 to 219 studies.

⁵ See

<https://web.archive.org/web/20220726101305/https://www.abacademies.org/journals/academy-of-marketing-studies-journal-home.html>

Table 1: The Nine Meta-Analyses that Included Studies Published in the Three Sampled Predatory Marketing Journals

Meta-Analysis	Publishing Journal	Cited Predatory Journal	Number of Studies Included in the Meta-Analysis	Number of Studies Included from Predatory Journal Articles	Times Cited in Scopus
Good et al. (2022)	JAMS	AMSJ	127	1 (study#73)	0
Kumar and Nayak (2022)	JICM	AMSJ	35	1(ref#5)	0
Maseeh et al. (2021)	P&M	AMSJ	184	1(ref#12)	16
Ismagilova et al. (2021)	EJM	AMSJ	51	1 (ref#87; study#24)	30
De Nisco and Oduro (2021)	JICM	AMSJ	82	1 (ref#56)	0
Miao et al. (2019)	ML	BJMS	19	2 (reference#18 and reference#51)	5
Darley and Lim (2022)	ML	IJMS	48	1 (ref#1)	0
Ladeira et al. (2016)	IJBM	IJMS	219	1 (ref#23)	15
Doyle and Armenakyan (2014)	JSM	IJMS	61	1 (ref#43)	15
<p>Notes: EJM=European Journal of Marketing; IJBM=International Journal of Bank Marketing; JAMS=Journal of the Academy of Marketing Science; JICM=Journal of International Consumer Marketing; ML=Marketing Letters; JSM=Journal of Strategic Marketing; P&M=Psychology & Marketing.</p> <p>Scopus search query for the AMSJ: (REF("academy of marketing studies journal") AND SRCTITLE (marketing) AND TITLE (meta-analysis)) AND (LIMIT-TO (SRCTYPE, "j"))</p>					

As Table 1 indicates, four out of the nine meta-analyses were published in *Marketing Letters* (ML) and the *Journal of International Consumer Marketing* (JICM). There are two meta-analyses in each of these two journals that include studies from predatory journal articles. Recall that ML is one of the top-five marketing journals in terms of published meta-analyses with eight meta-analyses. To put it another way, two of the eight meta-analyses published in ML incorporated studies from predatory journal papers. One of the two ML meta-analyses listed in Table 1 included two articles published in the BJMS. The meta-analysis in

question is the one by Miao et al. (2019). The two articles appear in the references list of the meta-analysis by Miao et al. (2019) as reference#18 (see p.345) and reference#51 (see p.347). Both these two references were marked with an asterisk indicating that they were included in Miao et al.'s (2019) meta-analysis. For the sake of information, Miao et al.'s (2019) meta-analysis combines findings from 19 "eligible" studies. To put it differently, two out of 19 studies included in that meta-analysis appeared in a predatory journal.

The JAMS is the marketing journal that published the largest number of meta-analyses. One of JAMS' most recent meta-analyses is the one by Good et al. (2022). The meta-analysis by Good et al. (2022) includes effect sizes nested within 127 studies. Upon examination of the list of the 127 included studies (available in the appendix of Good et al.'s article), the author has found that study#73 was published in the AMSJ.

A Closer Look at the Studies Published in Predatory Journals and Included in the Nine Meta-analyses⁶

Given that the three predatory journals (i.e., IJMS, BJMS, and AMSJ) claim to be OA rather than fee-walled publication venues, the author desired to download each of the articles cited in the nine meta-analyses in Table 1. However, the author was unable to locate the AMSJ article mentioned by Maseeh et al (2021). In fact, in their references list, Maseeh et al. (2021, p.1795) provide an incomplete/erroneous volume and issue numbers for that article. Using the title of the AMSJ article, the author found that it is supposed to appear in special issue 1 of volume 15 (i.e., 2011). The search for that article and special issue in the AMSJ archive yielded no results. As such, an entire AMSJ special issue has been obliterated. Predatory journals, such as AMSJ, have little or no interest in the digital preservation of their contents (COPE, 2019). Worse, this implies that Maseeh et al.'s (2021) findings are difficult, if not impossible, to replicate.

Table 2 summarizes the main findings of the cited meta-analysis, those of the cited predatory journal study, and any methodological issues with the latter. Size effects in these predatory journal articles, as seen, were almost always closer to the upper limit of confidence intervals of the effect sizes reported in the meta-analyses. Methodological issues include sampling (i.e., sample composition and/or sample size), measurement (i.e., single-item measures, untested dimensionality, incorrect reliability estimator), multicollinearity (i.e., highly correlated variables), and analysis selection issues (i.e., PLS instead of SEM, univariate instead of multivariate regression). The most problematic study is one published in AMSJ and included in the meta-analysis by Ismagilova et al. (2021). The authors of that article (published in AMSJ Volume 19, Issue 3, pp.281-295) were inconsistent about sample size. On page 287, it says 233, but on another (i.e., page 291), it says 243. The sample is entirely made up of students (88 females and 144 males, for a total sample size of 232 students). All variables were assessed using a single-item Likert scale. Furthermore, the three coauthors claim to have performed an independent samples t-test but report F-values instead of t-values in Table 1 on page 288 (i.e., F-values for Levene's for equality of variances). Ismagilova et al. (2021) made a mistake by including this dubious study in their meta-analysis.

⁶ The author would like to thank an anonymous EMPGENS reviewer for suggesting this closer examination of studies published in predatory journals.

Table 2: Results and Methodological Issues in Studies Published in Predatory Journals

Meta-Analysis	Main Findings	Reference to the Study in Predatory Journal	Findings from the Study in the Predatory Journal	Methodological Issues
Good et al. (2022)	Findings demonstrate that: (1) motivation is significantly associated with salesperson performance ($r=.245$, 95% CI=.238 to .252); (2) intrinsic motivation is more significantly associated with performance ($r=.298$, 95% CI=.287 to .308) than extrinsic motivation ($r=.176$, 95% CI=.166 to .186).	Study#73	Autonomy and self-efficiency (i.e., both of which are intrinsic motivations) are significantly associated with salesperson performance ($r_{\text{Autonomy}}=.34$, $p<.001$; $r_{\text{Self-efficiency}}=.42$, $p<.001$)	No dimensionality assessment for too long multi-item scales; significant collinearity between independent variables; uses univariate instead of multivariate regression; one independent variable is measured using a two-items scale; Cronbach's alpha is computed for a two-items scale.
Kumar and Nayak (2022)	The findings revealed the attitude as a most crucial antecedent of green energy behavioral intention. The second most associated construct with intention was subjective norms followed by perceived behavior control.	Ref#5	The effect of social influence was stronger ($b=.289$, $p<.01$) than consumer attitude ($b=.175$, $p<.001$) related to green energy purchase intention	Uses Partial Least Square instead of Structural Equation Modeling; the dependent variable is measured using a two-items scale; reports two composite reliability values for the dependent variable (i.e., .820 and .813).
Maseeh et al. (2021)	The findings show that risk perceptions trigger privacy concerns while benefit perceptions, familiarity, reputation, privacy policy, and trust mitigate privacy concerns which in turn affect customer attitude and usage of e-commerce platforms.	Ref#12	The author was unable to get access to the predatory journal article.	Maseeh et al. (2021, p.1795) give an incomplete/incorrect reference for the predatory journal article.

Table 2 cont'd

<p>Ismagilova et al. (2021)</p>	<p>The results of the meta-analysis showed that out of 20 identified factors affecting eWOM providing behavior, 16 were found to be significant (opinion seeking, information usefulness, trust in web eWOM services, economic incentive, customer satisfaction, loyalty, brand attitude, altruism, affective commitment, normative commitment, opinion leadership, self-enhancement, information influence, tie strength, homophily and community identity).</p>	<p>Ref#87 (i.e., study#24)</p>	<p>More male participants than female participants are likely to seek revenge toward the company for not being satisfied with a product or service. It also indicates that more females want to express themselves through online reviews.</p>	<p>Authors are inconsistent about sample size (on one page they state it is 233, on another one it is 243); sample entirely composed of students (with 88 females and 144 males, i.e., 232 students); all variables measured using a single-item Likert-type scale;</p> <p>Author report F-values instead of t-values for independent samples t-test (i.e., report F-values for Levene's test for equality of variances).</p>
<p>De Nisco and Oduro (2021)</p>	<p>Results reveal that partitioned country-of-origin has a significant, positive influence on consumer behavior ($r_{US}=.17$, 95% CI=.15 to .19; $r_{Non-US}=.31$, 95% CI=.29 to .34)</p>	<p>Ref#56</p>	<p>ANCOVA model explaining 14.5% of the variance. Results indicate that consumers in Turkey rated the country-of-manufacture importance higher, were more aware of the country-of-manufacture of their recent purchases, and cited the "made in" information as a purchase-influencing factor more frequently than consumers in the US.</p>	<p>Sample made of 561 respondents from Turkey and 298 from the US; uses a single-item Likert-type scale for measuring one variable (i.e., retailers' role as guarantors of quality); no dimensionality assessment is provided for a 10-item scale.</p>

Table 2 cont'd

Miao et al. (2019)	The relationship between emotional intelligence and service quality was significant and strongly positive (r = .56, 95% CI=.58 to .76)	Ref#18	Emotional intelligence positively relates to service quality (r=.601, p=.000).	Strong correlations between variables; no test for multicollinearity; no dimensionality assessment for too long multi-item scales; uses univariate instead of multivariate regression.
		Ref#51	Emotional intelligence positively relates to service quality (r=.753, p=.000)	Strong correlations between variables; no test for multicollinearity; no dimensionality assessment for too long multi-item scales; incomplete reporting of reliability for the multi-item scales
Darley and Lim (2022)	Ad creativity is positively related to cognition, attitudes, and behavioral intentions. For cognition, print media exhibits a larger impact than TV and non-traditional media. For affect, non-traditional media produces a smaller impact than print and TV media. For conation, TV media shows a larger impact than non-traditional media.	Ref#1	The ANOVA results showed that, in single exposure, the type of TV advertisement (i.e., creative vs. normal) has no significant effect on the amount of advertisement features recall on unaided basis (Mean-Creative = .22, Mean-Normal = .26, F= 2.72, p>.05), on subjects' attitude about the advertised brands (Mean-Creative= 4.68, Mean-Normal ads = 4.80, F=1.52, p>.05), and on purchase intention (Mean-Creative= 4.30, Mean-Normal = 4.49; F = 1.41, p>.05). For three exposures, creative ads developed significantly more favorable brand and advertisement attitude and greater unaided brand recall than normal ads (but not for purchase intention)	Sample entirely made of students (124 males and 48 females).

Table 2 cont'd

Ladeira et al. (2016)	Customer satisfaction is positively correlated with empathy ($r=.457$, $p<.000$), reliability ($r=.418$, $p<.000$), tangibility ($r=.347$), responsiveness ($r=.320$, $p<.000$)	Ref#23	Customer satisfaction is positively correlated with empathy ($r=.491$, $p<.01$), reliability ($r=.505$, $p<.01$), tangibility ($r=.461$), responsiveness ($r=.646$, $p<.01$)	Limited sample size ($N=132$); only a correlation analysis was used in this study.
Doyle and Armenakyan (2014)	MO is positively correlated with customer performance ($r = .49$, $95\%CI=.31$ to $.65$), market performance ($r=.40$, $95\%CI=.30$ to $.48$), and financial performance ($r=.29$, $95\%CI=.23$ to $.35$)	Ref#43	Market orientation and corporate performance are positively and strongly correlated ($r = .830$, $p=.000$)	Very small sample size ($N=60$); only a correlation analysis was used in this study.

What Should Meta-Analysts Do?

This paper aimed to raise marketing meta-analysts' awareness of predatory journals. It offered evidence that nine meta-analyses (six of which were published in 2021 and 2022) included studies from articles published in a selection of three predatory marketing journals. This paper primary's contribution, however, is to establish guidelines for meta-analysts. These are listed below:

- Before including a study, meta-analysts should check the DOAJ to see if the publishing journal is indexed there. They may also confirm if the journal's publisher is a member of the Open Access Scholarly Publishers Association (OASPA). They can also examine COPE's directory of members. Meta-analysts should check the DOAJ/OASPA/COPE members' directories, rather than assume a statement of membership on a journal's website is accurate.
- For meta-analysts aiming to avoid studies from predatory journals, they may choose to only search bibliographic databases with tight quality-control measures in place and stringent indexing criteria, like Clarivate's Web of Science. They should stop using Google Scholar. The scholarly search engine by Google lists research using an automated approach in which everything that appears "scholarly" is included, which may explain how content from predatory publications can find its way into meta-analyses. Although Google Scholar is a free tool that is easy to use for the general public, journalists, and researchers, it may contain predatory journals (Moussa, 2021).
- Quality journal lists are also fallible as they have been infiltrated by predatory journals. Meta-analysts should use them with extreme caution. As previously stated, the AMSJ is currently listed as a B (i.e. a "Well regarded") journal in ABDC's 2019 Journal Quality List.
- If they have access to Cabell's fee-walled Predatory Reports, meta-analysts can use it to determine whether or not the journal is predatory. It should be noted that Cabell's Predatory Reports are not without flaws (see e.g., Dony et al., 2020).
- If they do not have access to Cabell's Predatory Reports, meta-analysts should check the journal website for predatory journal features. COPE (2019) outlines 16 warning

signs of predatory journals. If two or more of the conspicuous characteristics of predatory journals are present, the journal is probably predatory.

Conclusion

According to Moussa and Linacre (2020), Cabell's Predatory Reports included, up to November 2020, some 140 predatory journals related to marketing. Despite the relatively large number of predatory marketing journals (i.e., 140 journals) and the seriousness of the harm they may bring to marketing knowledge, predatory publishing has attracted scant—read insignificant—interest within the marketing literature (though see Moussa, 2021).

Meta-analysis is an effective method for integrating accumulated knowledge. A growing issue is that meta-analyses may inadvertently capture studies published in predatory journals and that these studies will be included in summary estimates and influence results, recommendations, and, eventually, marketing theory and practice. Because predatory journals do not provide (adequate) peer review, the scientific merit and integrity of the published articles are uncertain. This is significant because meta-analysts may identify and include publications published in such OA journals in their meta-analyses. As a result, predatory journals pose a severe danger to the integrity of marketing knowledge, and meta-analysts must be aware of this issue. To return to the title's question, should studies from predatory marketing journals be included in a meta-analysis? The answer is a no. Advocating for the inclusion of studies from predatory journals in meta-analyses could be interpreted as a way to legitimize these journals or provide them with credibility (Munn et al., 2021). If meta-analysts are aware of the predatory nature of the publishing journal and nonetheless wanted to include research published there, so to avoid publication bias for example, they should cite it as “published in a predatory journal” both in the text and in the reference list. Meta-analysts may also perform sensitivity analyses examining results both with and without studies from predatory journals (Rice et al., 2021).

References

References marked with an asterisk are meta-analyses that include studies published in predatory journal articles.

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