INTRODUCTION

Meta-analysis is a method, which assists to incorporate multiple prior study results into a single research (Glass 1976) and can be considered a quantitative composition of entire aggregated research findings (Geykens et al. 2009). Furthermore, a meta-analysis gives absolute estimations about the certain relationship by virtue of its enhanced statistical power and also provides moderation effects of different factors (Hunter & Schmidt 2004; Zhao et al. 2004). However, when conducting a meta-analytic research, there are several issues that should be approached carefully not to have controversial and misleading results such as study inclusion criteria, publication bias, and heterogeneity of the methods (Schmidt & Hunter 2015; Stone & Rosopa 2017).
The meta-analytic approach has drawn significant attention among scholars in the field of social sciences, including finance, management, and marketing, etc. (Hunter & Schmidt 2004). Notably, the body of research on marketing has recorded valuable examples of meta-analysis containing various interesting research topics (Kirca & Yaprak 2010). Specifically, in the extant marketing literature, meta-analytic studies have offered useful insights into such areas of research as consumer behaviour (e.g., Szymanski & Henard 2001; Toufaily et al. 2013), services marketing (e.g., Carrillat et al. 2009; Orsingher et al. 2010), marketing communications (e.g., Eisend 2017; Lodish et al. 1995), and international marketing (e.g., Crouch 1996; Leonidou et al. 2014).

Building on the aforementioned issues, this chapter endeavours to contribute to the stream of marketing research pursuing the meta-analytic perspective. In particular, the main purpose of this chapter is twofold: (a) to throw light on the basic tenets of meta-analysis by concentrating on its nature, brief history, and important stages to conduct a good meta-analytic study, and (b) to investigate the influence of export market orientation on export performance through a meta-analytic research.

1. Meta-Analysis

1.1. What is Meta-Analysis?

Meta-analysis is a quantitative review approach that combines entire results among previous independent studies and presents statistical quantification via comparing study findings for the purpose of integrating results and generating new theoretical propositions (Glass 1976; Kirca & Yaprak 2010). Also, the term of ‘research synthesis’ is often used interchangeably with meta-analysis in the pertinent literature (Cooper et al. 2009). On the other hand, a literature review (i.e., narrative reviews) can be defined as an integration of relevant literature on a specific subject by the help of classifying studies regarding to the importance levels, whereas meta-analysis moves a step further than narrative reviews through the way of concentrating on study outcomes, assigning weights to the studies with respect to the mathematical criteria, synthesizing the results of primary research in systematic and
quantitative manners and drawing conclusions (Borenstein et al. 2009; Farley & Lehmann 2001; Kirca & Yapra 2010).

In reference to the advantages of meta-analysis, integrating the findings of several studies provides more credible and precise results via clarifying inconsistencies in the extant literature and identifying both research trend patterns in data over time and moderators/mediators in the scope of research (Borenstein et al. 2009; Cooper et al. 2009; Hedges 1987; Rosenthal 1978). Furthermore, the cumulative perspective of meta-analysis enables researchers to look at the whole picture and get a solid grasp of the phenomenon by means of establishing a certain intimacy with the relevant literature (Rosenthal & Dimatteo 2001). With regard to the criticisms of meta-analysis, since every meta-analytic review has been conducted with distinct inclusion criteria for the purpose of reviewing the pertinent literature, there may exists bias in sampling the findings, which should be addressed with the concern of publication bias such as file drawer problem (Rosenthal 1979). For instance, some crucial remarks indicated that studies reporting significant effects are more likely to be published rather than studies finding insignificant results, which directly constitutes a good example for bias in sampling (Borenstein et al. 2009). Moreover, as meta-analysis combines effect sizes from distinct studies with non-overlapping samples, a study reporting more than one effect size should be treated as individually for the examination of moderators and subgroups (Rosenthal & Rubin 1986). In addition, another common criticism is mixing apples and oranges, which implies that that meta-analysis contains distinct types of studies in the same analysis (Borenstein et al. 2009; Card 2012; Sharpe 1997) and could also be explained with providing broader generalization to the audience (Rosenthal & Dimatteo 2001).

1.2. A Brief History of Meta-Analysis

The history of meta-analysis dates back to the early 1900s, with the first attempt of combining correlation coefficients reported in 11 studies by Karl Pearson in 1904 to examine the relationship between immunity and mortality (Chalmers et al. 2002). Along with this initial application of the meta-analytic perspective, several efforts were made to progress the
related methodology; however, in spite of these initiatives in different streams of research, meta-analysis did not draw adequate attention in the field of social sciences until the 1970s (Card 2012). The meta-analytic approach came into existence in social sciences with the introduction of the “meta-analysis” concept by Gene Glass in 1976 (Card 2012; Hunter & Schmidt 2004), which has been also identified as the start of the modern era of the meta-analytic studies (Lipsey & Wilson 2001).

In addition to the seminal work of Glass (1976) focusing on psychotherapy, in the following years other cult studies on meta-analysis were conducted by Smith and Glass (1977), Schmidt and Hunter (1977), Rosenthal and Rubin (1978), and Smith, Glass, and Miller (1980), which have been widely acknowledged to make a breakthrough in the improvement of the meta-analytic knowledge (Cheung 2015; Lipsey & Wilson 2001). Building on these, in the 1980s, pioneer books were published on the subject (e.g., Glass et al. 1981; Hedges & Olkin 1985; Hunter et al. 1982; Rosenthal 1984), with the aim of enlightening the methodological and statistical foundations of meta-analysis (Card 2012; Cooper et al. 2009). Outstanding guidance accompanied with the requirement to synthesize the prior body of research has led to increasing tendency towards meta-analytic studies in different fields of research such as health and educational sciences, but in particular, social sciences (Card 2012; Cheung 2015; Rosenthal & DiMatteo 2001).

1.3. Meta-Analytic Research Process

The meta-analytic research process primarily involves five stages: (1) problem formulation, (2) literature search, (3) data assessment, (4) robustness tests, and (5) data analysis.

1.3.1. Problem Formulation

On the way of scientific process of meta-analytic reviews, the identification of problem statement constitutes the most challenging and primary step, as it consists of: (a) reading seminal works related to the subject; (b) defining crucial variables and operationalization of these constructs; (c) recognizing inconsistent results; and (d) determining the main aim of the study (Cooper & Hedges 1994; Kirca & Yaprak 2010). In fact, the problem statement produces a research question that needs to be answered in meta-analysis and assists
researchers for the subsequent stages such as identification of the studies, coding and the analysis of relevant studies (Lipsey & Wilson 2001). First, the topic needs to be chosen in the face of questioning whether it is a worthwhile area to conduct a meta-analysis with respect to the significance of the subject, the heterogeneity of the findings across studies in order to reveal possible mediators/moderators, the number of articles published in the extant literature, and the availability of reasonable number of studies reporting appropriate effect size measure for the analysis (Cooper et al. 2009). Furthermore, another important issue is to define variables and their conceptualizations, since narrow definitions reveal less information concerning to the distinct context that studies performed, while broader conceptualizations provide more contextual variations, drawing more credible conclusions (Kirca & Yaprak 2010; Cooper et al. 2009).

1.3.2. Literature Search

On the basis of the research problem developed in the first stage, the next step in the meta-analytic research process includes the recognition of eligible studies on the pertinent subject. As the strategy formulated to find related studies has an enormous impact on the meta-analytic findings, the right inclusion criteria need to be set (Grewal et al. 2018; Hunter & Schmidt 2004). In this stage, mainly, relevant articles are traced in different databases with the selected keywords; thereafter, the references of identified studies are manually checked to find additional studies on the topic of interest (Kirca & Yaprak 2010). As a critical point, in case of a study which can be grouped into conceptually equal but statistically separate replications, each finding should be evaluated individually (e.g., study investigating more than one consequence) (Grewal et al. 2018). A special concern needs to be also devoted to the literature search containing unpublished studies, since studies coming up with insignificant impacts are less likely to appear in academic publication outlets, which may yield to publication bias or the “file-drawer problem” (Lipsey & Wilson 2001; Rosenthal 1979). Correspondingly, exhaustive coverage in gathering the associated literature allows eliminating any potential bias of meta-analytic findings (Card 2012; Cooper et al. 2009); which in turn, enhances the overall excellence of meta-analysis (Kirca & Yaprak 2010).
1.3.3. Data Assessment

After the literature search for the purpose of data collection, the researchers need to make critical evaluation regarding to the quality of collected studies and accordingly code them with respect to standardized coding procedures (Cooper et al. 2009). First, there appears to be noteworthy points that can be perceived as important threats for the quality assessments of the studies: (a) evaluating the quality of research concerning their methodological quality rather than research findings or institutions of primary researchers; (b) the likelihood of making mistakes during the coding stage, recommending at least two researchers to code all the studies and assess inter-coder reliability; and (c) examining solutions for the missing data (Lipsey & Wilson 2001; Mahoney 1977; Orwin 1994). Second, as the main aim of this step is to develop a database, preparing a coding protocol which includes study characteristics (e.g., substantial and methodological attributes such as sample size, scale reliabilities), appropriate effect size statistics (e.g., correlation coefficients) and potential relevant moderators (e.g., time period, industry, operationalization) are recommended to improve the reliability and validity of the meta-analysis (Cooper & Hedges 1994; Henard & Szymanski 2001; Judge et al. 2001; Kirca & Yaprak 2010).

1.3.4. Robustness Tests

Robustness tests of meta-analysis fundamentally encompass the evaluation of publication bias and sensitivity analysis.

Publication Bias: An important consideration about meta-analysis needs to be assigned to missing data, of which the generally known type in a meta-analytic research is missing studies (Pigott 2012). The missing studies, which constitute a random group of all related studies, may not have a considerable influence on the results of a meta-analysis; nevertheless, the lack of inclusion of the ones, being systematically distinctive from the studies incorporated in the meta-analysis, produces a biased sample (Borenstein et al. 2009). Because published studies with statistically significant effects are more probably to be covered in a meta-analysis, in case of a biased sample, the meta-analytic findings will reveal this bias, with the computation of a higher mean effect size (Borenstein et al. 2009; Card
Broadly named as publication bias, this issue has been seen as one of the biggest risks for the validity of a meta-analytic study (Cooper et al. 2009). Accordingly, different graphical (e.g., funnel plot) and statistical techniques (e.g., Rosenthal’s (1979) ‘file drawer’ method, Orwin’s (1983) ‘fail-safe N’, and ‘trim-and-fill’ method by Duval and Tweedie (2000)) have been proposed to check for publication bias in a meta-analytic research (Palmatier et al. 2006; Pigott 2012).

**Sensitivity Analysis:** A sensitivity analysis is crucial for meta-analytic reviews in order to demonstrate the robustness of the study findings and help to understand whether the findings shift with the effect of change in inclusion criteria or assumptions of the studies (Borenstein et al. 2009). In a detailed manner, sensitivity analyses should be conducted to explore the effect of individual studies via omitting one study procedure and investigate if the elimination of one study would differentiate the results of the study such as reflecting an increased homogeneity in the subgroups or significant inverse trend (e.g., Strazzullo et al. 2009; Wit et al. 2010). Moreover, when reporting a meta-analytic review, the analysis is expected to present with a forest plot, which assist researchers to interpret the statistics by the help of visual plots with an intuitive sense via illustrating point estimates with confidence intervals (i.e., narrower interval can be interpreted as having better accuracy) and making an emphasis on anomalies emerged in the analysis (Borenstein et al. 2009).

**1.3.5. Data Analysis**

**Effect Size Calculation:** Symbolizing the findings of individual studies (Cheung 2015; Cooper et al. 2009), effect size is described as “a quantitative reflection of the magnitude of some phenomenon that is used for the purpose of addressing a question of interest” (Kelley & Preacher 2012, p. 137). In a meta-analytic research, relying on the effect size synthesized from relevant studies, a summary effect is calculated; effect size therefore represents one of the critical components of a meta-analysis (Borenstein et al. 2009). Vital concerns are associated with the choice of an effect size such as consistency of a selected effect size across studies to allow comparisons and interpretations; and relative independency of the measured effect size from the elements of research design (Cooper et al. 2009; Lipsey &
Wilson 2001). Effect sizes may take various forms (e.g., effect sizes resting on means, binary data, and correlations) on the basis of the essence of the relationships within a study, which can be convertible to from one type to another (Borenstein et al. 2009). Among these, correlation coefficient has been one of the most frequently employed effect sizes in social sciences (Cheung 2015). However, the transformation of correlations into Fisher's $z$-coefficients has been widely suggested, since $z$-transformed correlations have some advantageous statistical characteristics such as being nearly normally distributed (Geyskens et al. 2009).

**Heterogeneity Analysis:** After quantifying all studies with the help of standardized effect sizes, the collected data is prepared for synthesizing the results, which first requires heterogeneity analysis to reveal the variation in effect sizes (Borenstein et al. 2009). There exist several tests to analyze the distribution of effect size values such as $Q$ statistics, referring to the sum of squared deviations, $T^2$ statistics, implying to the variance of true effects, and $I^2$ statistics, which is the ratio of true variation to observed variation (Borenstein et al. 2009; Grewal et al. 2017). Furthermore, Geykens et al. (2009) recommend using combination of several heterogeneity tests for meta-analytic reviews. Afterwards, when the distribution of effect sizes is found as heterogeneous, the researchers need to determine whether this variation among effect sizes demonstrates a fixed-effects model or random-effects model (Grewal et al. 2017). While the former assumes the existence of same true effect size for all studies, the latter reflects its variation among studies (Pigott 2012). In addition, the choice of the meta-analytical model should be relied upon study objectives (i.e., making generalization to other populations with higher variation in effect sizes or sharing a common effect size for specific identified population) (Borenstein et al. 2009).

**Outlier Analysis:** When heterogeneity exists in effect sizes based upon the results of statistical tests, researchers should perform an outlier analysis in order to address heterogeneity in the data and assure the robustness of the findings (Geykens et al. 2009; Grewal et al. 2017). If meta-analytic results change with the removal of one outlier study, a precise examination is required for the analysis and the results should be reported both with
and without outliers involved in the analysis (e.g., Compeau & Grewal 1998). However, it should be noted that the presence of outlier studies does not make the analysis unreliable or inaccurate, which leads more precise results on the contrary (Grewal et al. 2017). There appears to be two techniques which can be used for the identification of outliers in the analysis such as traditional outlier detection techniques (i.e., schematic plot analyses) and sample-adjusted meta-analytic deviancy (SAMD) (Geykens et al. 2009). While the former can be conducted through schematic plot analysis, it has been criticized for disregarding sample size into account (Grewal et al. 2017). Furthermore, the latter, which is commonly used by several meta-analytic reviews (e.g., Chang & Taylor 2016) takes sample size into account and overidentifies relatively small correlations as outliers (Huffcutt & Arthur 1995).

Correcting for Measurement and Sampling Errors: Owing to the absence of completely reliable measures, measurement error is always embodied in a meta-analytic research (Hunter & Schmidt 2004). Critically, measurement error causes the production of underestimated effect sizes; hence, it is urgent to apply statistical remedies in an attempt to control for this error (Grewal et al. 2018). Construct reliabilities attained from relevant studies enable to adjust for measurement error, such that corrected effects are calculated by dividing correlation coefficient values by the square root of construct reliabilities (Hunter & Schmidt 2004). As for sampling error, it has been defended that “if the population correlation is assumed to be constant over studies, then the best estimate of that correlation is not the simple mean across studies but a weighted average in which each correlation is weighted by the number of persons in that study” (Hunter & Schmidt 2004, p. 81). The underlying reason behind this argument is attached to the notion that studies with larger sample sizes offer more rigorous results as to effect sizes compared to smaller sample-sized studies, because the sampling error in large sample-sized studies is lower in magnitude (Lipsey & Wilson 2001). For this reason, in meta-analyses sampling error is aimed to be reduced through weighting studies by sample size, which is in line with the approaches of Hedges and Olkin (1985) and Hunter and Schmidt (2004) (Cooper et al. 2009).
Moderator Analysis: Akin to the perspective pursued in primary studies, in a meta-analytic study the association between one or more covariates (moderators) and a dependent construct is possible to be investigated (Borenstein et al. 2009). Moderator analysis can be performed in both fixed-effects and random-effects models; but, each of these should be utilized with caution due to certain statistical deficiencies of these effects (Geyskens et al. 2009). Notably, the evaluation of moderating impacts in a meta-analytic research significantly differs between subgroup analysis and meta-regression (Grewal et al. 2018). In terms of the former, meta-analysis is carried out to make a comparison between the mean effects of separate sets of studies, which resembles to analysis of variance in a primary research, while in regard to the latter, meta-analytic research is conducted to test the linkage between study-level moderators and effect size, which is similar to multiple regression in a primary research (Borenstein et al. 2009; Grewal et al. 2018).

2. THE EFFECT OF EXPORT MARKET ORIENTATION ON EXPORT PERFORMANCE: A META-ANALYTIC APPLICATION

2.1. Problem Formulation

In the second part of this chapter, a meta-analysis is conducted with an example application in the marketing area. In this application, it is aimed to systematically synthesize empirical findings based on a meta-analysis of relevant studies investigating the relationship between export market orientation and export performance. Depending upon the seminal works in the extant literature (e.g., Cadogan et al. 1999; Kohli & Jaworski 1990; Narver & Slater 1990) and increased interest for the concept of export market orientation in the contemporary studies of international marketing literature, it was decided to examine export market orientation-export performance relationship. In particular, export companies with higher market orientation are better perform in their export operations, as they quickly learn and adapt themselves to the unfamiliar environments (Boso et al. 2012; Chung 2012; He et al. 2018).

In this sense, crucial variables were identified to perform the meta-analysis such as export market orientation (i.e., independent), export performance (i.e., dependent) and economic
development level of countries (i.e., moderator), with respect to the conceptualization and operationalization of the constructs. Furthermore, the last two decades have witnessed a wealth of studies analysing the link between export market orientation and export performance (e.g., Acosta et al. 2018; Cadogan et al. 2012; Chang & Fang 2015; Gerschewski et al. 2015; Navarro-García et al. 2014).

2.2. Literature Search

Relying on the critical relevance of the establishment of right inclusion criteria to meta-analytic results (Grewal et al. 2018; Hunter & Schmidt 2004), four criteria were developed to find out the eligible studies on the subject: (a) to concentrate on examining the association between export market orientation and export performance, (b) to measure export market orientation on the basis of well-established scales involving MKTOR (Narver & Slater 1990), MARKOR (Kohli et al. 1993), export market orientation scale developed by Cadogan et al. (1999), and market orientation scale of Depshandé et al. (1993), (c) to assess export performance with both objective and/or subjective indicators, and (d) to be empirical research by using primary and/or secondary data and to report Pearson’s correlation coefficients or its variants between the variables of interests (Rosenthal 1994).

Related studies were identified by following both manual and electronic search methods. In terms of the former, electronic databases (e.g., EBSCO, Elsevier, and JSTOR) were searched with the keyword of “market orient*” in combination with “export performance”. Regarding the latter, the references of the relevant studies recognized by means of electronic searching were checked. In total, 38 studies that analyse the linkage between export market orientation and export performance were obtained; however, 12 of these were eliminated due to the failure to satisfy the eligibility criteria. As a result, with the inclusion rate of 68.4% (26 of a total of 38 studies), 49 effects of export market orientation on export performance were gathered from 28 independent samples included in 26 studies (N=7,428). This is comparable to other meta-analytic studies on the pertinent subject (e.g., Ellis 2006; Grinstein 2008).
2.3. Data Assessment

Regarding to the quality of the studies, all respective studies were scrutinized based upon the Academic Journal Guide for 2015 published by the Association of Business Schools (ABS), which has been commonly benefited as an academic journal guide (e.g., Adams et al. 2015; Coombes & Nicholson 2013). In total, 26 papers covering the period from 1998 to 2018, were coded for the meta-analysis and two independent coders recorded the data on a specified coding schema, which involves the key study characteristics (i.e., study name, journal name, industry, country, firm size, sample size, sampling method, analytical approaches, the conceptualization of dependent and independent constructs, reliabilities, and available effect size estimates). Lastly, the countries were coded based upon the economic development levels (i.e., low-income economies, middle-income economies and high-income economies) (World Bank 2016). Also, all disagreements were solved at the end of discussions and inter-coder reliability ranged from 90% to 95% (Szymanski & Henard 2001).

2.4. Robustness Tests

To estimate the publication bias related to published studies, both graphical and statistical techniques were adopted. Firstly, the funnel plot was inspected to visually check for the possibility of publication bias, and owing to the approximately symmetric distribution of the effect sizes around the mean, any evidence of publication bias was not observed (Pigott 2012). Secondly, the three most frequently applied statistical techniques were employed to understand whether the publication bias exists in this meta-analytic study (Geyskens et al. 2009; Grewal et al. 2018). Initially, Rosenthal’s (1979) ‘file drawer’ method was followed in an effort to reveal the number of null effect studies required to replace the significant result with the non-significance one (Rosenthal 1979). In this sense, the file drawer N number (20,132) proved that the meta-analytic results are resistant to the file drawer problem. Next, Orwin’s ‘failsafe N’ (set to 0.05), representing the number of missing studies that would change the overall effect size to a particular non-zero level (Orwin 1983), also supported the low likelihood of publication bias. Finally, in line with the ‘trim-and-fill’ method of Duval and
Tweedie, the funnel plot illustrating the observed effects accompanied by the imputed effects was evaluated, which was drawn by trimming and filling the data (Duval & Tweedie 2000). The ‘trim-and-fill’ procedure again depicted that this meta-analysis is safe from publication bias.

Besides, sensitivity analysis was also performed in order to check the robustness of the findings by the help of ‘one study removed’ option. Since the results did not significantly differentiate from the previous one, outliers were not excluded from the study for further meta-analyses. Furthermore, the statistics were also interpreted via forest plot analysis, reflecting any anomalies in the analysis with visual plots and confidence intervals. In this study, when examining the forest plot analysis, there exist few spots of outliers and the point estimates with confidence intervals can be interpreted as depicting a better accuracy, as large majority of the confidence intervals illustrate narrower ranges (Borenstein et al. 2009).

2.5. Data Analysis

Before the integration of all results, it is required to reveal the true variation in effect sizes and choose the right model for further analyses. In line with this, as suggested by Geykens et al. (2009), we conducted several different heterogeneity tests. As a result of these analyses, the random-effects model was adopted, representing a higher variation in effect sizes of studies, since the findings (Q-value (48df)= 483.028 (p=0.000), I-squared= 90.063) reveal a significant and high amount of heterogeneity in the distributions of variance among the studies (Cooper et al. 2009). Also, the heterogeneity of the results indicates that there appears to be possible moderators and mediators across studies (Hunter & Schmidt 2004). Moreover, when the 95% confidence interval does not involve zero, it also implies important clues about the heterogeneity of the results and reflects a significant relationship between independent and dependent variable (Finkelstein et al. 1995).

In an important amount of the studies (46.2%) involved in the impact of export market orientation on export performance, the correlation coefficients were reported on the basis of the linkage between different market orientation dimensions (e.g., customer orientation, export market intelligence generation, etc.) and export performance outcomes. For these
instances, the effect sizes across the dimensions of export market orientation were averaged to calculate a mean export performance score for overall export market orientation (e.g., Ellis 2006; Grinstein 2008). In terms of measurement error, corrected correlations were computed through dividing each effect size by the square root of the construct reliabilities (Hunter & Schmidt 2004). In case of the studies failing to present the reliabilities, the mean reliability of the export market orientation concept was substituted (e.g., Ellis 2006; Kirca et al. 2005), which was specifically estimated for each of the scales utilized to measure export market orientation (The mean reliability for the MKTOR scale is 0.842, for the MARKOR scale 0.802, for the export market orientation scale of Cadogan et al. (1999) 0.878, and for the market orientation scale of Depshandé et al. (1993) 0.890, respectively). Thereafter, the reliability-corrected correlations were converted into Fisher’s z-coefficients, which were subsequently averaged, and then retransformed into correlation coefficients to interpret (e.g., Grinstein 2008; Kirca et al. 2005).

In this meta-analytic study, the proposed relationship between export market orientation and export performance was tested by means of Comprehensive Meta-Analysis (CMA version 2.2.057) software. Table 3.8.1 summarizes the meta-analytic results incorporating the direct impact of export market orientation on export performance and the moderator analysis. The meta-analytic findings reveal that overall export market orientation has a favourable influence on export performance ($r=0.323$, CI$_{95\%}$ 0.279 to 0.366), which can be evaluated as above moderate (Cohen 1988). This is consistent with other meta-analytic studies on the market orientation-performance association in the domestic context (e.g., Ellis 2006; Kirca et al. 2005) and with the notion that being export market-oriented enables to better respond to the conditions in overseas markets, which in turn, to cultivate export success (Cadogan et al. 2012; Murray et al. 2007).

“Insert Table 3.8.1 near here”

Concerning the moderator analysis, the statistical figures prove that significant differences exist among low-income, middle-income, and high-income countries with respect to the correlation between export market orientation and export performance (Q-value (2df)= 6.302...
The results suggest that the effect size for the export market orientation-export performance linkage is higher in countries with low-income level ($r=0.621$, CI$_{95\%}$ 0.341 to 0.800) compared to middle- and high-income countries. The reason for this finding might be attributed to the fact that owing to the lack of sufficient tangible resources (e.g., physical, human, and monetary assets), firms operating in low-income countries rely heavily on market-oriented strategies to outperform their rivals in export markets (Birru et al. 2018).

DISCUSSION

This chapter was aimed to consist of two distinct parts. In the former section, brief information about meta-analysis and its history were provided; and the crucial steps that should be followed were explained in order to conduct a good meta-analysis: (1) problem formulation; (2) literature search; (3) data assessment; (4) robustness tests; and (5) data analysis. On the other hand, the latter represents a real application of meta-analysis, examining the relationship between export market orientation and export performance and performing through CMA version 2.2.057 software program. With the integration of seminal papers in the specific research field, meta-analytic papers draw a big picture and become a vital must to enhance our understanding for both researchers and practitioners, since meta-analysis also provides comprehensive insights for future research studies and offers new theoretical perspectives to unexplored areas (Palmatier et al. 2017).

Besides, last two decades have received growing attention to the meta-analytic studies, particularly in the marketing field (e.g., Grinstein, 2008; Kirca et al. 2005; Kirca & Yaprak 2010; Scheer et al. 2015). In sum, this chapter provides significant contributions to the extant literature and constitutes a meta-analysis guideline for both academics and practitioners since the method of meta-analysis has been comprehensively explained, both approaching from theoretical perspectives and illustrating a real application from the marketing field.

SUMMARY

Meta-analytic studies provide integrated and accumulated knowledge of key research findings in a specific domain via testing robustness of the findings, revealing inconsistent previous results, and identifying potential new insights for future studies (e.g., moderators,
measures and approaches). However, it should be also approached with caution considering its substantial assessments.

REFERENCES


**ANNOTATED FURTHER READING**

For more details about a meta-analytic research, please see the seminal works of Borenstein et al. (2009), Cooper et al. (2009), and Hunter and Schmidt (2004).
Table 3.8.1: Summary of the meta-analytic results for the association between export market orientation and export performance

<table>
<thead>
<tr>
<th>The links</th>
<th># of effects</th>
<th>Total sample size</th>
<th>Corrected $r$</th>
<th>Standard Error, $r$</th>
<th>-95% LCL</th>
<th>+95% UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall export market orientation $\rightarrow$ export performance</td>
<td>49</td>
<td>7,482</td>
<td>0.323</td>
<td>0.007</td>
<td>0.279</td>
<td>0.366</td>
</tr>
<tr>
<td>The effect of country’s economic development level $\times$ export market orientation $\rightarrow$ export performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-income country</td>
<td>2</td>
<td>159</td>
<td>0.621</td>
<td>0.102</td>
<td>0.341</td>
<td>0.800</td>
</tr>
<tr>
<td>Middle-income country</td>
<td>21</td>
<td>2,832</td>
<td>0.278</td>
<td>0.008</td>
<td>0.217</td>
<td>0.337</td>
</tr>
<tr>
<td>High-income country</td>
<td>26</td>
<td>4,491</td>
<td>0.333</td>
<td>0.009</td>
<td>0.275</td>
<td>0.389</td>
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