On the Relationship between Self-Efficacy and Sales/Job Performance: Does Gender Matter?

By Robert A. Peterson and Victoria L. Crittenden

In two out of three studies conducted, the relationship between self-efficacy and sales or job performance systematically differed for male and female salespeople. More specifically, the self-efficacy – sales/job performance relationship was generally stronger for female salespeople than it was for male salespeople in the two studies. This finding contradicts prior research that the relationship between self-efficacy and sales performance is ubiquitous and uniform. As such, it has significant theoretical and managerial implications for the manner in which salespeople are recruited, trained, and rewarded.

INTRODUCTION

Self-efficacy is one of the most widely researched constructs in the personal selling and sales management domain; more than 200 studies examining its role in personal selling and sales management have been have been published in the past 35 years. In these studies, self-efficacy has variously served as an independent variable (e.g., Bonney, Plouffe, & Wolter, 2014; Carballo-Penela, Varela, & Bande, 2019), a dependent variable (e.g., Shoemaker, 1999), a mediator variable (e.g., Jaramillo & Mulki, 2008), and a moderator variable (e.g., Chelariu & Stump, 2011), as well as the nexus of educational programs (e.g., Knight, Mich, & Manion, 2014).

A frequently studied topic is the relationship between self-efficacy and sales performance. In a recent review of the literature, Peterson (2020) identified some five dozen empirical studies that focused on the self-efficacy – sales performance relationship. Of these studies, a substantial majority hypothesized and found a direct positive relationship between self-efficacy and sales performance: as self-efficacy increased, sales performance increased. Interestingly enough, none of these studies considered the possibility that the relationship might be moderated by gender, despite the fact that some two decades ago Babin and Boles (1998), Ramaswami (2002), and Boles, Wood, and Johnson (2003) studied the effect of salesperson gender on variables such as satisfaction, and Moncrief, Babakus, Cravens, and Johnston (2000, p. 246) mused as to "whether gender differences, in and of themselves, create different attitudinal and behavioral relationships" in the context of personal selling.

Since then, with the exception of studies such as those of Karatepe, Yavas, Babakus, and Avci (2006) of frontline service representatives and Seagraves and Gallimore (2013) of real estate agents, research that has incorporated gender differences has merely compared males and females on mean values of various attitude or behavioral measures. Therefore, because prior research on the role of gender as a moderator is both scarce in general and virtually nonexistent in the context of self-efficacy and sales performance, the present investigation explored this knowledge gap by means of three independent studies incorporating different research designs, samples, and measures of self-efficacy and sales performance to provide a general perspective on the relationship.

Given prior research demonstrating the importance of self-efficacy in determining sales performance, this article begins with a foundational definition of self-efficacy and an overview of past studies of self-efficacy and sales performance. Then, a brief review of gender in the context of sales research is presented. Next, the research methodology utilized to explore the moderating role of gender in the relationship between self-efficacy and sales performance is detailed. This is

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followed by a discussion of the three empirical studies that investigated the moderating role of gender in the self-efficacy – sales (job) performance relationship. The managerial and research implications of the three studies are subsequently set forth. Finally, the article concludes with a discussion of the limitations of the research and suggestions for future research.

SELF-EFFICACY

As formalized by Bandura (1977, 1982, 1986, 1997), self-efficacy is one of the most widely studied constructs in behavioral literatures that include psychology, education, medicine, and business. According to Bandura (1997, p. 2), self-efficacy is "the belief in one's capabilities to organize and to execute the courses of action required to produce given attainments." Thus, self-efficacy refers to what people believe they can accomplish with respect to a particular task. That is, people who believe they can perform well on a task actually do perform better than people who believe they will fail. As self-efficacy increases, people who exert more effort and are more persistent will learn to deal with task-related obstacles, which will likely lead to improved performance (e.g., Chebat and Kollias, 2000; Crittenden, Crittenden, and Ajjan, 2019; Gist, 1989). It would seem, therefore, that self-efficacy impacts behavior by influencing the choice of activities to engage in or goals to pursue, defining expectations regarding the likely success of these activities in achieving the goals, and determining the persistence of efforts in pursuing the goals.

Gender and Self-Efficacy

Social cognitive theory is an underlying foundation for gender research, and as such, it is concerned with psychological characteristics that differentiate between women and men (Bandura, 1989; Bussey and Bandura, 1999). For example, in a study by Chew, Halim, and Matsui (2002), men exhibited higher self-efficacy than women in enterprising and realistic domains, whereas women exhibited higher self-efficacy than men in artistic, investigative, and social domains. Huang (2013) found that content domain was a significant moderator of academic self-efficacy, with females displaying higher language arts self-efficacy than males and males exhibiting higher mathematics, computer, and social sciences self-efficacy than females.

Consequently, it might be expected that a relationship would exist between self-efficacy and sales/job performance as a function of gender. The key distinction between the research reported here and previous gender research in sales is that the purpose of the present research was not to compare mean self-efficacy or sales performance responses of male and female salespeople. Rather, the purpose was to understand whether the structural relationship between self-efficacy and sales performance varies as a function of gender.

Self-Efficacy and Sales Performance

Beginning with the seminal research of Barling and Beattie (1983), the relationship between self-efficacy and sales performance has been one of the most frequently studied topics in sales management. The vast majority of this research posits a direct, positive relationship between self-efficacy and sales performance, regardless of the characteristics or roles of the salespeople investigated. For example, Ahearne, Mathieu, and Rapp (2005), Monteiro and Vieira (2016), Rapp, Baker, Bachrach, Ogilvie, and Beitelspacher (2015), and Singh, Kuma, and Puri (2017) all found positive relationships between salesperson self-efficacy and sales performance. That is, the greater a salesperson's self-efficacy, the more successful that salesperson. Given the practical concerns about gender inequality in the sales profession, the relationship between self-efficacy and sales performance is deemed particularly relevant from a gender perspective.

GENDER IN SALES RESEARCH

The concern about pay imbalances and upward mobility of women in sales has, for decades, been noted both in the popular press and among academic researchers. Piercy, Cravens, and Lane (2003) suggested that the issue of gender has to be considered in order for companies to attain superior sales performance in the marketplace. Yet, historically, research results have been mixed in terms of gender differences, with many of the reported differences between female and male salespeople pertaining to personality traits (e.g., Ladik, Marshall, Lassk, and Moncrief, 2002).

For instance, Dubinsky, Jolson, Michaels, Kotabe, and Lim (1993) reported minimal motivational differences between male and female salespeople, whereas Ricks and Veneziano (1998) and Siguaw and Honeycutt (1995) found some gender-related differences in sales performance relative to role perceptions, role conflict, role ambiguity, motivation, personal ability, job satisfaction, and organizational commitment. While Frino and Desiderio (2013) did not find a significant relationship between gender and the performance of sales professionals in a business-to-business context, they did find differences between women and men based on longevity in the sales position. When Moncrief et al. (2000) examined salesperson gender, they suggested that gender differences, while representative of the late 1900s, had become less applicable by the start of the 21st century.

Curiously, while there have been studies regarding gender differences in sales performance, there has been a paucity of reported research investigating the possible role of gender as a moderator of the self-efficacy – sales performance relationship. This is somewhat surprising given that the self-efficacy – sales performance relationship is of high importance to both sales scholars and sales practitioners. In one self-efficacy – work performance study, Renn and Fedor (2001) reported that because gender was not significantly related to either work quality or work quantity, it was excluded from further analysis. Although Ladik et al. (2002), Boles, Madupalli, Rutherford, and Wood (2007), and Rutherford, Marshall, and Park (2014) respectively found that gender moderates selected antecedents to job satisfaction outcomes, they did not specifically examine the self-efficacy – sales performance relationship.

What is missing in the extant research on self-efficacy and sales performance is an in-depth look at the role of gender in the relationship. Specifically, despite dozens of empirical studies of the relationship between self-efficacy and sales performance and both qualitative (e.g., Herjanto and Franklin, 2019) and quantitative summary analyses of antecedents of sales performance (e.g., Churchill, Ford, Hartley, and Walker, 1985; Verbeke, Dietz, and Verwaal, 2011; Vinchur, Schippmann, Switzer, and Roth, 1998), gender has only been examined in the context of average self-efficacy or sales performance response differences between males and females, never as a possible moderator of the self-efficacy – sales performance relationship itself. Thus, the present research sought to capture the relationship between self-efficacy and sales (job) performance utilizing gender as a moderator of the relationship.

METHODOLOGY

Given that the purpose of the present research was to generate broad insights into the relationship among self-efficacy, gender, and sales/job performance, three independent studies were conducted during 2017 and 2018 that collectively incorporated more than 1200 salespeople. The parameters of each study were varied such that the respective methodological approaches, samples, and operative variables permitted wide-ranging generalizations about the focal relationship. Kritikou, Stein, De Cock, and Hanson (2016) suggested that such a "hybrid" research approach of combining more than one data set for the same research question provides more comprehensive insights than one-study research paradigms. This approach is also consistent with research methodology in which information is obtained through different methods to explore a research question (e.g., Lobe, Livingstone, and Haddon, 2007).

Aggregating evidence from multiple studies permitted different perspectives on the question of interest that in turn led to a holistic and comprehensive view of gender in relation to self-efficacy and sales performance. Each of the three studies was based on data derived from different types of salespeople and employed different research designs and different measures. In Study 1, participants consisted of both business-to-business and business-to-consumer salespeople. Participants in Study 2 were retail salespeople who had a second, non-retailing job. Participants in Study 3 consisted of direct sellers who personally sell to consumers on a one-to-one basis. Hence, collectively, the samples represent a broad spectrum of salespeople in the United States.

The three studies shared only one commonality. All data were collected from members of the Dynata business professional and consumer panel, a large, Internet-based commercial panel, after appropriate quality-control screening to provide a wide geographical and organizational dispersion of study participants in the

United States. Resulting data were analyzed utilizing standard t-tests for determining significant female-male differences (i.e., mean contrasts) and self-efficacy – sales performance relationships (i.e., correlation coefficients) that facilitated comparisons across the three studies.

Study 1

Study 1 investigated the relationship between self-efficacy and (self-reported) sales performance for a nationwide sample of 410 business-to-business and business-to-consumer salespeople. Randomly selected members of the Dynata Internet panel were screened as to whether they were employed full-time in a business and, if so, whether they occupied a role in the business that required selling.

In Study 1, 130 of the 410 participants were used to construct a four-item, sales-specific, self-efficacy scale based on a factor analysis of 19 self-efficacy items reported by, among others, Schwepker and Good (1999), Sujan, Weitz, and Kumar (1994), Vieira, Perin, and Sampaio (2018), and Wang and Netemeyer (2002). These four items consisted of 7-point rating scales that provided a theoretical range of scale values from 4-28:

- I feel I am very capable at the task of selling.
- I can easily use a wide variety of sales approaches.
- It is easy for me to sell my products/services.
- My abilities allow me to successfully perform my sales job.

Coefficient alpha for the four items was an acceptable .87 (Nunnally, 2017). Only one factor emerged from the factor analysis, with 71% of the variance in responses being accounted for by this factor.

Two hundred-eighty study participants served as a validation sample to investigate whether the relationship between the self-efficacy scale and a six item, 7-point measure of sales performance differed between male and female salespeople. The six items were adapted from the Behrman and Perreault (1982) sales performance scale. The theoretical range of scale scores was 6-42:

- I met my sales goals in 2018.
- My customer knowledge is better than most salespeople in the company.
- I excel at generating sales of new products.
- Other salespeople in the company come to me for advice.
- I am very good at closing sales.
- I typically exceed company sales targets.

One week after the self-efficacy scale was administered to the validation sample, the sales performance scale was administered. Thus, a prospective (predictive) protocol was used to collect study data. Of the 280 study participants in the validation sample, half were females (due to sample balancing), 24% were 19-34 years of age, 26% were 35-49 years of age, 31% were 50-64 years of age, and 19% were 65 years of age or older. Thirty percent sold to both consumers and organizations, 41% sold only to consumers, and 29% sold only to businesses or organizations. Coefficient alpha was .87 for the self-efficacy scale and .90 for the sales performance scale for the validation sample. Both alphas indicate acceptable reliability of the scales (Nunnally, 2017).

Results

Although the male and female salespeople did not differ in terms of their self-efficacy scale means (male mean = 8.6, SD = 4.3; female mean = 8.7, SD = 4.3), they did differ significantly ($p<.01$) with respect to their sales performance scale means. The male mean was 15.3 (SD = 6.3), whereas the female mean was 17.9 (SD = 7.4). Thus, female salespeople perceived themselves as significantly more successful than did male salespeople.

The correlation between self-efficacy and sales performance ($r = .52$) was significant for the validation sample as a whole ($p < .01$). Hence, about one quarter of the variation in sales performance was accounted for by self-efficacy. However, there was a difference in the ability of self-efficacy to predict sales performance as a function of gender. The self-efficacy – sales performance correlation was .43 for males (thus predicting 18% of the variance in the sales performance of male salespeople),

whereas it was .60 for females (thus predicting 36% of the variance in the sales performance of female salespeople). The difference in predictability (i.e., the difference between the male and female correlations) was statistically significant ($p<.01$). Thus, even though the male and female salespeople did not differ with respect to their self-efficacy, self-efficacy was a significantly better predictor of sales performance for female salespeople than it was for male salespeople.

Study 2

Study 2 investigated whether self-efficacy emanating from a retail selling experience translated into successful performance in a non-retailing job. In particular, Study 2 consisted of investigating a sample of 336 retail salespeople. Similar to Study 1, this sample was obtained by screening randomly selected members of the Dynata Internet panel. After applying various quality-control checks, potential study participants read a description of retail trade based on the Census Bureau definition and were then asked, "Are you currently a salesperson or sales clerk in a retail trade establishment?" and (if so) "What is the name of the retail trade establishment that you are currently associated with?" Individuals answering "yes" to the first question and providing a legitimate retail establishment (as determined by the authors; firms such as IBM were not considered retailers) served as participants in Study 2.

This study employed a retrospective approach to data collection (Morrell and Arnold 2007). Specifically, study participants were asked to indicate the extent to which "you have benefitted from your retail selling experience in terms of improved business and professional skills" using 14 items. The theoretical underpinning of this approach was based on the linkage [Selling Experience] →[Self-Efficacy]→[Sales Performance] suggested by researchers such as Harrison, Rainer, Hochwarter, and Thompson (1997) and Sitzmann and Yeo (2013). Self-efficacy was defined as beliefs about professional benefits derived from a selling experience. Responses to the 14 items were measured on 4-point rating scales anchored by "strongly disagree" and "strongly agree" (with the scale anchors reversed for half of the study participants).

Study participants were divided into two subsamples. One subsample (N = 103) was used to construct the self-efficacy scale. Responses to the 14 self-efficacy items provided by the scale development subsample of 103 study participants were factor analyzed to construct a five-item scale. The items in the scale were posed in conjunction with the statement "As a result of my retail selling experience…

- I improved my decision-making skills.
- I enhanced my confidence.
- I acquired better sales skills.
- I improved my business management skills.
- I am better at prioritizing tasks."

Scale scores could range from 5 to 20; coefficient alpha for the composite scale was an acceptable .85 (Nunnally, 2017).

The other subsample (N = 233) consisted of study participants who currently had a job in addition to the one in retailing. This subsample constituted the validation sample. Individuals in the validation sample responded to the item, "Because of my retail selling experience, I perform better in other, non-retail jobs," on a 4-point "strongly disagree" to "strongly agree" scale (with scale anchors reversed for half of the validation sample). The validation sample served as the basis of the self-efficacy – job performance relationship investigation and provided insights into possible gender differences.

Approximately 63% of the validation sample of 233 study participants consisted of female salespeople. About 39% of the study participants were between the ages of 18 and 34; 18% were 35-44 years of age, 19% were 45-54 years of age, 22% were 55-64 years of age, and 2% were 65 years of age or older. Twenty-seven percent of the study participants had been a retail salesperson for less than one year, 30% had been a retail salesperson for 2-3 years, and 43% had been a retail salesperson for four or more years.

Results

Female and male study participants in the validation sample did not differ significantly with respect to either their average self-efficacy or their perceived non-retailing job performance. For the self-efficacy scale, the female mean was 15.9 (SD = 3.2), whereas

it was 16.0 (SD = 3.1) for the male study participants. Similarly, there was not a significant difference between the female and male job performance scale means. The female mean was 3.3 (SD = .8), whereas the male mean was 3.5 (SD = .7).

The correlation (r = .32) between self-efficacy and non-retail job performance for the total validation sample was statistically significant ($p < .01$). Thus, self-efficacy accounted for about 10% of the variance in non-retail job performance. Importantly, the self-efficacy – non-retail job performance correlation was .03 for male retail salespeople and .45 for female retail salespeople. Hence, whereas self-efficacy did not account for any variance in the reported non-retail job performance of male retail salespeople, it accounted for 20% of the reported non-retail job performance of female retail salespeople. The correlations for the female and male retail salespeople were significantly different ($p < .01$), illustrating the moderating effect of gender on the self-efficacy – job performance relationship in the context of retail salespeople who also have a non-retailing job.

Study 3

The third study consisted of examining the relationship between self-efficacy and sales performance for a sample of 495 direct selling salespeople. Direct selling is defined as personal selling away from a fixed business location (Peterson and Wotruba, 1996). As such, it is a specialized, yet widespread, form of one-to-one personal selling. According to the Direct Selling Education Foundation (2017), approximately 5.3 million people in the United States are active direct sellers. Because direct sellers are independent contractors with no firm responsibilities other than selling and often only work part-time, direct selling represents personal selling in its purist form, and, unlike the complex issues associated with being a salesperson in a large organization (Schmitz and Ganesan, 2014), selling success is due to the individual efforts of the direct sellers.

Analogous to Studies 1 and 2, direct seller study participants were members of the Dynata Internet panel. After answering a series of screening and quality control questions, a random sample of panel members read the following definition of direct selling and were then asked whether they are currently direct sellers:

> **Direct Selling** is defined as a channel of distribution for personally selling products directly to consumers away from a fixed retail location. **Direct selling** includes sales made through one-on-one demonstrations, a party plan, and other personal contact arrangements as well as internet sales. **Direct selling** occurs at home, at work, and in other non-store locations.

Individuals stating they were currently direct sellers were asked the name(s) of the company(ies) they worked for as a qualification check; individuals providing the name(s) of a direct selling company constituted the validation sample. Data collection was similar to the retrospective approach employed in Study 2, and the self-efficacy scale used in Study 2 was used in Study 3 (coefficient alpha = .90 for the direct selling self-efficacy scale). Sales performance was measured by asking the question, "How successful do you consider yourself compared to other independent contractors in your direct selling company? Please rate your success on the 7-point scale where 1 is 'much less successful' and 7 is 'much more successful'" (scale anchors were rotated randomly).

Sixty-nine percent of the direct seller study participants were females; more than 80% had attended college or were college graduates. Approximately 37% were 18-34 years of age, 19% were 34-44 years of age, 18% were 45-54 years of age, 15% were 55-64 years of age, and 11% were 65 years of age or older. About 45% of the direct seller study participants reported working nine or fewer hours per week on their direct selling job (illustrating the part-time nature of direct selling).

Results

Female and male direct salespeople differed with respect to their self-efficacy and sales performance scale means. Male direct sellers possessed a higher self-efficacy mean (16.0; SD = 3.2) than did female direct sellers (14.9; SD = 3.7). Although the difference was statistically significant ($p < .01$), it was not considered substantial (i.e., less than 2% of the variance in self-efficacy was accounted for by gender). Similarly, male direct sellers perceived themselves as significantly more successful ($p < .01$) relative to other direct sellers in their company (mean = 4.8; SD = 1.8) than did female

direct sellers (mean = 3.7; SD = 1.9). These differences may be due in part to the fact that relatively more male study participants (23%) than female study participants (8%) indicated that direct selling was more than a 30-hour per week job.

The total validation sample correlation between self-efficacy scale responses and sales performance was a significant .49 ($p < .01$), which means that about 25% of the variance in sales performance was accounted for by self-efficacy. In this instance, though, the correlations between self-efficacy and sales performance for the male and female direct sellers were nearly identical: .47 for male direct sellers and .48 for female direct sellers. Hence, there was no gender effect with respect to the structural relationship between self-efficacy and self-reported sales success for the direct salespeople studied.

DISCUSSION

Even though inspection of the self-efficacy and sales/job performance means (and standard deviations) of male and female salespeople would suggest that there are minimal substantive self-efficacy and sales/job performance differences as a function of gender, detailed analysis of the relationships between self-efficacy and sales/job performance revealed structural differences in two of the three studies conducted. These differences have theoretical as well as managerial implications and have been overlooked in the personal selling and sales management literature.

The results suggest that the relationship between self-efficacy and sales/job performance is more complex than the universally direct and positive relationships previously reported in the literature, and that mean self-efficacy and sales/job performance differences between male and female salespeople do not reflect the complexity of the relationship. At first glance, the mean differences observed between male and female salespeople support the conclusion of Moncrief et al. (2000) with regard to minimal gender differences in perceived self-efficacy. However, when gender was considered as a moderator, significantly more variance in the self-efficacy – sales/job performance relationship was explained for women than for men in two of the three studies in the present research. Even when male and female salespeople did not differ significantly in terms of perceived self-efficacy, self-efficacy was a better predictor of sales/job performance for female salespeople than it was for male salespeople in two of the studies.

In the direct seller study, although male salespeople reported significantly higher self-efficacy and sales performance means than did female salespeople, there was not a gender effect in terms of the difference in variation accounted for in sales performance. This may be due to the nature of direct selling. Because direct selling is one-to-one selling primarily carried out by independent contractors on a part-time basis, it is fundamentally different from selling for a company as a full-time employee. Since direct selling is generally unconstrained by sales team members or a formal, structured sales organization, the nearly identical self-efficacy – sales performance relationships respectively obtained for male and female direct sellers need to be examined in depth to determine possible causes and a more complete understanding of the self-efficacy – sales performance relationship in direct selling.

Given the moderation effect of gender observed in the present research, with the exception of direct selling companies, companies might be advised to focus on increasing the self-efficacy of female salespeople more than male salespeople. Doing so would seem to have a higher return on investment with respect to increasing sales performance. This recommendation would appear consistent with practical observations of female salespeople. For example, Verrill (2019) suggested that women in sales sabotage their success due to a lack of confidence that results in their being afraid of self-promotion, undervaluing themselves and their service, not asking for directions, making relationships the priority, and being afraid of making a mistake. This is consistent with the conclusion of Flynn, Heath, and Holt (2011) that low self-confidence behaviors (i.e., being overly modest, not asking, blending in, and remaining silent) result in women unintentionally stunting their own careers. Kay and Shipman (2014) went so far as to suggest that confidence matters as much as competence when it comes to success.

Managerial and Research Implications

The finding that the relationship between self-efficacy and personal selling performance was stronger for

female salespeople than for male salespeople in two of the three studies and equivalent in the third has managerial implications for selecting, training, and rewarding salespeople. Most obviously, since self-efficacy is malleable, with the self-efficacy – sales/job performance relationship being stronger for female salespeople than for male salespeople, a managerial focus on increasing the self-efficacy of female salespeople should be more beneficial for them personally and for their firm than a focus on increasing the self-efficacy of male salespeople.

Stated somewhat differently, the weaker relationship observed between self-efficacy and sales performance for the male salespeople studied suggests that increasing their self-efficacy may not yield the equivalent improvements in sales performance as might be the case for female salespeople. Indeed, perhaps measuring the self-efficacy of individuals applying for a personal selling job should be considered part of the hiring process. Then, upon selection, different onboarding via training methods tailored to each gender might be pursued (within ethical and regulatory constraints). Importantly, ongoing developmental programs will need to take gender differences into account, and different reward protocols might be required for women and men salespeople so that the emphasis on improving sales performance by increasing the self-efficacy of the salesforce fits with the needs of each gender. Thus, both onboarding and ongoing training and programming as well as appropriate reward structures might be key to developing both male and female salespeople appropriately given that there is variation in sales performance as a function of gender.

From a research perspective, studies are required to determine whether what constitutes self-efficacy in male and female salespeople differs and whether there are different paths to self-efficacy in male and female salespeople. Perhaps self-efficacy means something different to men and women who are salespeople. These determinations will be critical for developing appropriate gender-based training programs for salespeople. In any case, the present results require that future research not assume, either implicitly or explicitly, that the underlying relationship between self-efficacy and sales/job performance is universal, substantive, and direct.

Limitations and Future Research

Similar to most studies of self-efficacy and sales performance, this research has limitations. First, the research used subjective measures for sales/job performance rather than a dollar or profit metric. However, an objective measure is only valid and meaningful within a single organization. Since data were derived across industries and companies, an objective measure was not viable. Although researchers such as Dess and Robinson (1984) and Chandler and Hanks (1993) have argued that subjective measures of performance are relevant measures, future research could consider third-party ratings of both self-efficacy and sales/job performance that might produce yet another perspective on the relationship.

Second, there was a presumption that the retrospective measures used in Studies 2 and 3 for self-efficacy (i.e., professional benefits derived from a selling experience) were valid. Many studies in the personal selling and sales management literature on the self-efficacy – sales performance relationship merely assume that self-efficacy exists (often as an exogenous variable), with no thought given to its origin. Thus, while one can criticize the use of perceived "professional benefits" as a measure of self-efficacy or a retrospective approach when measuring self-efficacy, at least doing so acknowledges both a possible origin of self-efficacy (i.e., experience) as well as the fact that it is malleable and not a distal characteristic.

Third, the results presented here are not causal. While Study 1 data were prospective in nature, it is important to keep in mind that the relationships investigated were based on correlational data and consisted of self-reports. Even so, the results suggest that past studies that simply treated self-efficacy as exogenous and/or considered the self-efficacy – sales performance relationship to be straightforward and/or uniform across individuals and situations need to be reconsidered. For a comprehensive understanding of the role of gender in the self-efficacy – sales performance relationship, experimental research is required.

Fourth, future research into the self-efficacy – sales performance relationship needs to take into consideration the complexity of the product or service

offering as well as potential customers. It may be that product or service complexity plays a role in terms of the genesis of self-efficacy or how it relates to sales performance, or even how self-efficacy might relate to customer type. For example, there may be differences in the self-efficacy – sales performance relationship for salespeople (males as well as females) selling multiple complex medical or information communication technologies to companies or organizations as compared to salespeople (males as well as females) selling a single inexpensive product to consumers.

Fifth, although two of the three studies supported gender as a moderator of the self-efficacy – performance relationship, in only one of the two supporting studies was the dependent variable sales performance. Thus, while salespeople constituted all three samples, implications based on the conclusions need to be taken with caution. Additional research is needed to substantiate the findings for the sales domain.

Finally, while the present research results imply that it is important for companies to take an active role in enhancing salesperson self-efficacy given its relationship to performance, the structural differences of the relationship for female and male salespeople need to be extensively explored and replicated across roles, tasks, and situations. Insights are not available from the present research as to what support or experiences actually influence perceptions of self-efficacy. Research that centers on the practical aspects of programmatically identifying antecedents of self-efficacy and its enhancement is especially critical, particularly given the potential benefits that could accrue to female salespeople.

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