A meta-analysis of the relationship between sales orientation-customer orientation (SOCO) and salesperson job performance

Fernando Jaramillo
College of Business Administration, University of Texas at Arlington, Arlington, Texas, USA

Daniel M. Ladik
Sawyer School of Management, Suffolk University, Boston, Massachusetts, USA

Greg W. Marshall
Crummer Graduate School of Business, Rollins College, Winter Park, Florida, USA, and

Jay Prakash Mulki
College of Business Administration, Northeastern University, Boston, Massachusetts, USA

Abstract

Purpose – In the years since Saxe and Weitz developed a scale to measure the selling orientation and customer orientation (SOCO) of a salesperson, research findings on the effect of SOCO on salesperson job performance have shown mixed results. This article aims to synthesize the findings from the empirical studies to identify the direction and the strength of this relationship. In addition, it aims to investigate the moderating effect of customer type (business or end user consumer) and type of job performance measure used (subjective or objective).

Design/methodology/approach – Research questions were addressed by a meta-analysis of 16 studies containing 17 effect sizes from 3,477 respondents.

Findings – Meta-analysis results reveal an attenuated weighted mean effect size (*r*) of this relationship of 0.14, with a 90 percent confidence interval of 0.04 to 0.23. The disattenuated mean effect size (*rc*) is 0.16. Findings also reveal that neither customer type nor type of job performance measures moderated the SOCO and job performance relationship.

Research limitations/implications – Although diligence was exercised to reduce selection bias, relevant studies may have been excluded from this meta-analysis.

Practical implications – Study findings demonstrate that SOCO is an important predictor of salesperson job performance. High performance occurs when salespeople focus their energy on identifying the customer's individual needs and offer products to satisfy those needs.

Originality/value – This is the first published SOCO meta-analysis.

Keywords Selling, Customer orientation, Performance management, Relationship marketing

Paper type Research paper

An executive summary for managers and executive readers can be found at the end of this article.

Introduction

The marketing concept can be defined as a "willingness to recognize and understand the consumer's needs and wants, and a willingness to adjust any of the marketing mix elements, including product, to satisfy those needs and wants" (Houston, 1986). Organizations that have acculturated the marketing concept work to create value with customers' needs in mind. These organizations see themselves as focused on acquiring and serving customers – a customer orientation – by conducting business activities that enhance customer value (Rust *et al.*, 2004).

Saxe and Weitz (1982, p. 344) conceptualized customer-oriented selling as the practice of the marketing concept at the individual salesperson level, and define customer-oriented selling as " ... the degree to which salespeople practice the marketing concept by trying to help their customers make purchase decisions that will satisfy customer needs". Saxe and Weitz (1982) originally developed the Selling Orientation-Customer Orientation (SOCO) scale as a measure of the degree to which salespeople engage in customer-oriented selling.

Researchers have recognized the potential impact of SOCO on numerous variables that have been empirically demonstrated to be important to the organization, its employees, and its customers. SOCO is important for

The current issue and full text archive of this journal is available at **www.emeraldinsight.com/0885-8624.htm**

Journal of Business & Industrial Marketing
22/5 (2007) 302–310
 [ISSN 0885-8624]
[DOI 10.1108/08858620710773431]

Authors are listed in alphabetical order to denote equal contribution to this project.

organizations since it impacts the adoption of innovative technology, job attitudes, turnover intentions, employee innovation, adaptive selling, employee relationships with supervisors, and organizational citizenship behavior (Boles *et al.*, 2001; Dadzie *et al.*, 1999; O' Hara *et al.*, 1991). SOCO affects employee's attitudes such as job satisfaction, motivation, and organizational commitment (Pettijohn *et al.*, 2002; Siguaw and Honeycutt, 1995). On the customer side, SOCO influences customer relationship development (Williams, 1998), and satisfaction and loyalty (Gillis *et al.*, 1998; Goff *et al.*, 1997; Pettijohn *et al.*, 2002). In view of this, Saxe and Weitz's (1982) SOCO article has been rated as one of the top ten selling related articles of the twentieth century (Leigh *et al.*, 2001).

Job performance is a critical variable to sales organizations of all types (Sharma *et al.*, 2000). Salesperson job performance is central to firm success due to its impact on organizational effectiveness, survival, and growth (Levy and Weitz, 2003; MacKenzie *et al.*, 1998). Researchers have investigated the SOCO and job performance relationship in both business-to-consumer (B2C) and business-to-business (B2B) settings (Boles *et al.*, 2001; Siguaw and Honeycutt, 1995). However, to-date mixed findings exist as to the strength and direction of this relationship (see Table I). Our aim is to synthesize these findings by identifying the direction and estimating the strength of relationship between SOCO and salesperson job performance.

To achieve this objective, a meta-analysis is conducted. Simple comparisons of empirical studies may produce the false impression of conflicting findings because research results are probabilistic and could have occurred by chance due to sampling and measurement error (Hunter and Schmidt, 2004). Therefore, meta-analyses are useful due to their ability to distinguish between the magnitude of an effect, statistical significance, and transparency of methodology (Franke, 2001; Hunter and Schmidt, 2004). By integrating findings across studies, meta-analysis controls for statistical artifacts and provides general answers about the relationships among variables (Arthur *et al.*, 2001; Hunter and Schmidt, 2004). Because of its capacity to synthesize empirical research and to offer general answers to important research questions, meta-analysis has been deemed one of the most important innovations in behavioral science research (Hunter and Schmidt, 2004). Given its emphasis on empirically supported research, meta-analysis has contributed to theory development and testing in marketing (Krishna *et al.*, 2002). A recent study shows that 44 meta-analyses have been conducted in marketing and published in leading marketing journals (Cano *et al.*, 2004).

Sales orientation-customer orientation (SOCO)

SOCO is composed of two factors, sales orientation and customer orientation. A sales orientation occurs when salespeople are primarily engaged in selling activities that emphasize "getting the sale" (Boles *et al.*, 2001; Schultz and Good, 2000). On the other hand, customer-oriented salespeople focus their efforts on understanding the customer's individual needs by helping them to identify alternatives, evaluate them, and select the best solution (Boles *et al.*, 2001; Johnston and Marshall, 2005). Also, customer-oriented salespeople engage in behaviors directed at increasing long-term customer satisfaction by avoiding short sighted sales tactics that sacrifice customer interest (Ehert, 2004; Saxe and Weitz, 1982).

Rather than using tricks and techniques to get people to buy a product or service, effective customer-oriented salespeople are solution providers who understand customers' needs and deliver value (Bosworth *et al.*, 2003). The customer orientation dimension of SOCO captures these characteristics by evaluating the salespersons' ability to help customers assess those needs, offer products that satisfy their needs, adapt sales presentations to match customer interests, avoid deceptive or manipulative tactics, and avoid the use of

Table I The SOCO and job performance relationship: prior study effect sizes

	n^a	r^b	$r_c{}^c$	Customer type	JP measure[d]
Bass *et al.* (2003)	119	0.26	0.31	B2C	O
Boles *et al.* (2001)	294	0.04	0.04	B2C	S
Chakrabarty *et al.* (1997)	138	0.19	0.22	B2B	S
Dunlap *et al.* (1988)	178	0.01	0.02	B2C	O
Flaherty (1999)	402	0.05	0.06	Mixed	O
Hart (1984)	149	−0.05	−0.06	B2B	O/S
Howe *et al.* (1994)[e]	254	−0.04	−0.04	B2C	O
Jaramillo (2004)	223	0.06	0.07	B2C	O/S
Keillor *et al.* (2000)	126	0.25	0.29	B2B	O
Martin (2001)	313	0.76	0.82	Mixed	S
McIntyre *et al.* (2000)	396	0.14	0.17	B2C	S
Pettijohn *et al.* (1997)	180	0.05	0.06	B2C	O
Rozell *et al.* (2004)	103	0.27	0.31	B2B	S
Saxe and Weitz (1982)	23	0.40	0.46	Mixed	O
Saxe and Weitz (1982)	40	0.16	0.19	Mixed	O
Siguaw and Honeycutt (1995)	268	−0.13	−0.16	B2B	S
Swenson and Herche (1994)	271	0.15	0.18	B2B	S
Total	3,477				

Notes: [a]Sample size; [b]attenuated effect size; [c]disattenuated effect size; [d]measure: subjective (S), objective (O); [e]average correlation

high pressure selling. These factors are likely to result in improved salesperson job performance. The above discussion leads to the first research question:

RQ1. Is SOCO positively related to salesperson job performance? If so, how strong is this relationship?

Moderators

A heretofore unanswered question is whether the relationship between SOCO and job performance is stronger in business-to-consumer (B2C) compared to business-to-business (B2B) selling. Goff *et al.* (1997) suggested that the effect of SOCO on job performance is greater when the interactions between the salesperson and the customer are more cooperative and consultative in nature. Until now, the presumption has been that such interactions tend to be found more often in B2B compared to B2C selling (Ehert, 2004; Rackham and De Vincentis, 1999). That is, customer orientation may result in a higher performance in B2B than B2C selling because in B2B buying decisions are generally more complex and the salesperson is often perceived by the buyer as a trusted advisor who helps him/her in the decision making process (Johnston and Marshall, 2005; Rackham and De Vincentis, 1999). If true, this would imply that a customer's perception of salesperson value creation is greater in B2B than in B2C.

Another potential moderator of the SOCO-job performance relationship is the type of measure used to assess performance (subjective or objective). Several meta-analyses have hypothesized that the type of measure used to assess performance moderates the relationships among job performance and various antecedents (Cano *et al.*, 2004; Churchill *et al.*, 1985; Kirka *et al.*, 2005; Vinchur *et al.*, 1998). However, conflicting evidence is found regarding this moderating effect. On one hand, Churchill *et al.*'s (1985) meta-analysis suggests that the moderating effect of measurement is statistically insignificant. Conversely, three recent meta-analyses indicate that correlations of job performance and its antecedents are artificially inflated when subjective measures are used (Cano *et al.*, 2004; Kirka *et al.*, 2005; Vinchur *et al.*, 1998). This artificial inflation may be explained by two factors. First, often the same individual is providing both the performance and antecedent data, thereby increasing the likelihood of common method variance when subjective measures are used (Lindell and Whitney, 2001). Second, job performance and its antecedents are often measured using common anchor points (e.g. needs improvement, outstanding) and scale formats (e.g. Likert scales), resulting in artificially inflated correlations (Donaldson and Grant-Vallone, 2002).

The above discussion leads to the following research questions involving moderators:

RQ2. Is the relationship between SOCO and salesperson job performance stronger for B2B compared to B2C?

RQ3. Is the relationship between SOCO and salesperson job performance stronger when a subjective or an objective measure of performance is used?

Before providing details on our study, it is important to point out that the assessment of the psychometric properties of the SOCO scale itself has been the subject of several studies. These studies generally indicate that SOCO has acceptable reliability and validity (Michaels and Day, 1985; Swenson and Herche, 1994; Thomas *et al.*, 2001). SOCO deals with achieving sales objectives (SO-component) while enhancing customer value (CO-component) (e.g. Gillis *et al.*, 1998; Saxe and Weitz, 1982). Boles *et al.*(2001) concluded that the sales orientation (SO-component) is not necessarily harmful to enhancing the customer value (CO-component) because customers expect some degree of "selling" from a salesperson (inherent in the role).

Method

Meta-analysis was used to investigate the relationship between SOCO and salesperson job performance. As previously indicated, this method allows researchers to synthesize the empirical evidence of the relationship between two constructs. We used the following five eligibility criteria for inclusion of studies in this meta-analysis: effect size, linguistic range, sample origin, time frame, and publication type.

Eligibility was restricted to studies reporting a Pearson's Correlation Coefficient (r) between SOCO and some measure of job performance, or other statistics that can be converted to r (e.g. F-value, t-value, p-value, and χ^2). Studies reporting the coefficient of determination (R^2) of a linear regression where job performance was the dependent variable and SOCO was the independent variable were also eligible. Studies available in English that were published in refereed journals, conference proceedings, and dissertations between August 1982 and August 2004 were eligible for inclusion in this study. This time frame is used because SOCO was first published in August 1982. Studies published were eligible regardless of the country where the sample was obtained so long as the other eligibility criteria are met.

Literature search

We employed the following procedure in order to obtain as comprehensive as possible a collection of studies reporting an effect size for SOCO and salesperson job performance relationship. First, computer-based searches of empirical studies were conducted. The databases searched included ABI/Inform, Emerald, FirstSeach ECO, IDEAL, LEXIS/NEXIS Academic Universe, Science Direct, the American Psychological Association PsycARTICLES, Academy of Management Online Article Retrieval, and KLUWER. The following key words were used in our electronic search: SOCO, sales orientation, customer orientation, Saxe, and Weitz.

Next, we conducted manual examinations of the articles identified from the computer-based searches. In addition, manual searches were conducted on all issues of the following journals during the eligible publication period: *European Journal of Marketing, Industrial Marketing Management, International Journal of Research in Marketing, Journal of Business Research, Journal of Business and Industrial Marketing, Journal of the Academy of Marketing Science, Journal of Management, Journal of Marketing, Journal of Marketing Research, Journal of Marketing Theory and Practice, Journal of Personal Selling & Sales Management,* and *Journal of Retailing*.

Finally, a call for working papers, forthcoming articles, and unpublished research was posted on two different occasions using the American Marketing Association ELMAR list serve (approximately 4000 members) and the American Marketing Association DocSIG PhD student list serve (approximately 900 members), both of which reach faculty and PhD students

in marketing. A message was also posted using the Sales Listserv under the auspices of the *Journal of Personal Selling & Sales Management*.

The search process yielded a total of ten journal articles, two conference proceedings articles, and four dissertations that met all of the above stated criteria for inclusion. The 16 studies provided 17 effect sizes (one article reported on two samples) resulting from 3,477 respondents. Respondents were retail salespeople, business-to-business salespeople, and various forms of financial salespeople from services and manufacturing sectors of three countries: USA, India, and Ecuador (Table I).

Homogeneity and random effects model

Homogeneity tests were conducted using a χ^2 statistic, with $k - 1$ degrees of freedom (where k is the number of effect sizes included in the meta-analysis), to decide whether a random effect or a fixed effect model should be used (Arthur *et al.*, 2001). This test is conducted to see whether the variance in the data points is greater than what would be expected by chance. The χ^2 statistic was significant at $\alpha = 0.05$ ($\chi^2_{15} = 166.91$, critical $\chi^2_{15} = 25.00$), demonstrating that the effect size distribution is heterogeneous and that a random effects model is appropriate for studying the SOCO and salesperson job performance relationship (Arthur *et al.*, 2001).

As prescribed by Arthur *et al.* (2001), the mean effect size ($\bar{r}$) was estimated as a weighted average of each study's effect size (r_i), adjusted for sample size (Ni). The standard error of the mean correlation for heterogeneous studies (SE_r) is used for computing the confidence interval of $\bar{r}$. SE_r is a function of $\bar{r}$, the total sample size (N), the number of effect-sizes (k), and the residual variance (Var_{res}). The formulas used for these calculations are found in Arthur *et al.* (2001).

Meta-analytic model

The fixed effects and random effects models are the two most widely used procedures in meta-analysis (Arthur *et al.*, 2001; Hunter and Schmidt, 2004). The fixed effects model assumes that the distribution of effect sizes is homogeneous (i.e. no moderators) whereas the random effects model takes into consideration the heterogeneity of effect sizes (i.e. potential moderators). This study employed the random effects model because it is more generalizable and conservative since confidence intervals around the mean are larger (Arthur *et al.*, 2001; Hunter and Schmidt, 2004; Overton, 1998).

Adjustments for artifacts

Based on Hunter and Schmidt (2004), the reported effect sizes were adjusted for measurement error of the SOCO and salesperson job performance measures (Table I). Failure to adjust for the reliability of the scales underestimates the true relationship between variables (Caruso, 2000; Nunnally and Bernstein, 1994). Before making these adjustments, we verified that the correlations reported in the original studies were attenuated (i.e. that the original articles did not make adjustments for scale reliability). This check was important to ensure that later we did not adjust for measurement error twice. Adjustments for measurement error (i.e. correction for attenuation) have been used in prior meta-analyses in marketing (see Cano *et al.*, 2004; Henard and Szymanski, 2001; Rich *et al.*, 1999).

Credibility and confidence intervals

In meta-analysis, researchers have typically relied on confidence intervals for testing the statistical significance between two variables. However, some studies report credibility intervals as well. The distinction between credibility and confidence intervals is of critical importance to meta-analysis (Arthur *et al.*, 2001; Hunter and Schmidt, 2004; Whitener, 1990). This is because both mathematical and interpretive differences exist between these two intervals. A confidence interval concerns the range of the true population value and is calculated using the standard error of the mean effect size (Hunter and Schmidt, 2004; Kline, 2004; Whitener, 1990). Therefore, they are used to test for the statistical significance of a relationship. This is because the mean effect-size is an estimate of the degree to which a relationship exists in the population (Fern and Monroe, 1996). The mean effect size is considered statistically significant at a specified alpha level if the confidence interval does not include zero (Kline, 2004; Lipsey and Wilson, 2001). On the other hand, a credibility interval corresponds to the estimated distribution of an infinite sample of effect sizes and is calculated using the standard deviation of the mean effect sizes (Ford *et al.*, 1987; Hunter and Schmidt, 2004; Whitener, 1990). An appropriate use of credibility intervals would be to investigate whether a particular company, when applying SOCO, will exhibit significant differences in results. The above discussion suggests that, given our goals for the study, confidence intervals should be used for testing the statistical significance of the relationship between SOCO and job performance. Confidence intervals have been used in several recent meta-analyses to assess the statistical significance of relationships among constructs (e.g. Jaramillo *et al.*, 2005; Judge and Piccollo, 2004).

Results and discussion

The research questions presented in this meta-analysis were addressed by using the procedures outlined by Arthur *et al.* (2001) and Hunter and Schmidt (2004). Following these guidelines, mean effect sizes, and confidence intervals were calculated, as well as credibility intervals for comparison purposes only. Both attenuated (observed correlations) and dissatenuated (adjusted correlations) mean effect sizes were estimated. Table II summarizes these results.

RQ1. Is SOCO positively related to salesperson job performance? If so, how strong is this relationship?

Using a random effects model, our meta-analysis reveals an attenuated weighted mean size (r) for the relationship between SOCO and job performance of 0.14 ($r_c = 0.16$) with a 90 percent confidence interval of 0.04 to 0.23 (Table II). Hence at $\alpha = 0.10$, a positive relationship exists between SOCO and salesperson job performance, providing evidence for a positive response to RQ1. Some authors suggest a Fisher-Z transformation of the attenuated effect sizes (Fern and Monroe, 1996; Rosenthal, 1979). When such a procedure is used, the conclusion about the positive relationship between SOCO and job performance does not change. The attenuated mean effect size (r_z) using a Fisher-Z transformation is 0.16.

RQ2. Is the relationship between SOCO and salesperson job performance stronger for B2B compared to B2C?

The moderating effect of customer type (B2B, B2C) was tested by calculating confidence intervals for each customer type. As indicated in Table II, six effect sizes came from B2B,

Table II Mean effect size statistics

	k[a]	n[b]	r[c]	90% Confidence interval Low	90% Confidence interval High	r_c[d]	90% Credibility interval Low	90% Credibility interval High	FS n[e]
SOCO and job performance									
Overall	17	3,477	0.14	0.04	0.23	0.16	−0.23	0.57	255
Customer type									
BTB	6	1,055	0.08	−0.04	0.19	0.09	−0.17	0.35	49
BTC	7	1,644	0.07	0.01	0.13	0.08	−0.01	0.17	48
Mixed	4	778	0.35	0.07	0.64	0.42	−0.19	1.00	164
Job performance measure									
Subjective	9	2,155	0.17	0.02	0.32	0.21	−0.28	0.70	180
Objective	10	1,694	0.06	0.00	0.12	0.07	−0.05	0.19	60

Notes: [a]Number of effect sizes; [b]sample size; [c]attenuated mean effect size; [d]disattenuated mean effect size; [e]fail-safe *n*: studies with an effect size of zero ($ri = 0$) needed to reduce the mean effect size (rc) to 0.01

seven from B2C, and three from studies containing mixed customer segments. Using Arthur *et al.*'s (2001) procedure, mean effect sizes and 90 percent confidence intervals were calculated separately for B2B, B2C, and the mixed samples. As shown in Table II, results reveal a mean effect size for B2B of 0.08 ($CI_{90\%}$ −0.04 to 0.19), a mean effect size for B2C of 0.07 ($CI_{90\%}$ 0.01 to 0.13), and a mean effect size for the mixed sample of 0.35 ($CI_{90\%}$ 0.07 to 0.64). Since the three confidence intervals overlap, the moderating effect of customer type is not statistically significant, indicating evidence of a negative response to RQ2. Goff *et al.* (1997) suggest the effects of SOCO are greater when the salesperson has the ability to assist the customer, when the selling task is complex, and when the nature of the relationship between the salesperson and the customer is cooperative in nature. Until now, it has been generally presumed that these factors are more relevant in B2B settings (Ehert, 2004; Rackham and De Vincentis, 1999). Importantly, our findings provide evidence that the SOCO factors are just as relevant in B2C settings as in B2B – new information especially relevant to retail organizations and their salespeople.

RQ3. Is the relationship between SOCO and salesperson job performance stronger when a subjective or an objective measure of performance is used?

The moderating effect of the type of job performance measure (subjective, objective) was tested by calculating confidence intervals for each measurement type. As shown in Table II, nine effect sizes came from subjective measures of performance and ten effect sizes came from objective measures. Mean effect sizes and 90 percent confidence intervals were calculated separately for studies containing objective or subjective measures of performance. Table II shows that the mean effect size of the relationship between SOCO and job performance was 0.17 ($CI_{90\%}$ 0.02 to 0.32) when subjective measures of performance were used and 0.06 ($CI_{90\%}$ 0.00 to 0.12) when objective measures were used. Although the use of subjective measures of performance inflates the SOCO and job performance relationship, the moderating effect of measurement type is not statistically significant because the two confidence intervals overlap. These results allow us to put forth a negative response to *RQ3*. Use of subjective or objective performance measures does not significantly affect the SOCO and salesperson job performance relationship.

Discussion, managerial implications and limitations

Since its inception in 1982, SOCO has been the subject of several studies investigating its psychometric properties and dimensionality (Thomas *et al.*, 2001), antecedents (Widmier, 2002), and relationship to constructs such as salesperson motivation (Pettijohn *et al.*, 2002), adaptive selling (McIntyre *et al.*, 2000), customer satisfaction (Goff *et al.*, 1997) and the ability of salespeople to develop long-term relationships with their customers (Schultz and Good, 2000; Williams, 1998). Especially, researchers have long been concerned about the strength and direction of the relationship between SOCO and job performance (Boles *et al.*, 2001; Siguaw and Honeycutt, 1995). This meta-analytical study contributes to the literature with the definitive finding of a significant positive relationship between SOCO and salesperson job performance. And, because our study results negate the presumption that SOCO's inherent attributes are applicable only in B2B environments, retail sales organizations and other B2C settings can benefit from more attention to SOCO.

Despite these findings, we urge caution as firms begin to consider integrating SOCO into their culture and daily operations. As with so many variables related to performance, SOCO explains only about two percent of the overall variance in salesperson job performance. This result is in line with other studies that have investigated other antecedents of job performance including job satisfaction, job involvement, and customer orientation, each of which explains less than four percent of the variance in performance (see Brown and Peterson, 1993; Holmes and Srivastava, 2002; Joshi and Randall, 2001). In addition, Churchill *et al.* (1985) argue that organizations should not focus on augmenting one or two variables shown to positively impact performance. Rather, they advocate that, in order to truly enhance the performance of salespeople, firms need to focus their attention on multiple factors that together create a performance-oriented culture. SOCO can be an important element in the performance success mix.

Use of SOCO is bolstered by the fact that since the scale was originally published in 1982, at least eight articles have included investigations of its psychometric properties using both US and international samples (e.g. Brown *et al.*, 1991; Daniel and Darby, 1997; Gillis *et al.*, 1998; Herche and Engelland, 1996; Kelley, 1988; Michaels and Day, 1985; Tadepalli, 1995; Thomas *et al.*, 2001). These studies have found adequate evidence of psychometric properties of the scale with reliabilities ranging from 0.74 to 0.94. Evidence of generalizability has been demonstrated in a variety of sales settings in both B2B and B2C. In addition, several studies have confirmed the presence of the two separate factors, SO and CO (e.g. Brown *et al.*, 1991; Thomas *et al.*, 2001). Given this level of stability, we believe the reader can certainly proceed to incorporate SOCO into the performance mix with high confidence in its properties.

Two additional issues may add insight into the level of correlation between SOCO and salesperson job performance. First, the studies included in our sample focus primarily on

in-role aspects of salesperson performance such as sales volume, dollar sales, and supervisory ratings. They do not take into account extra-role performance aspects such as prosocial, spontaneous, and organizational citizenship behaviors. Evidence exists that extra-role behaviors are central to successful customer oriented selling (MacKenzie *et al.*, 1998). Second, SOCO measures both sales orientation and customer orientation, and it is possible that these two aspects have different effects on salesperson job performance. For example, Boles *et al.* (2001) found that customer orientation was positively correlated to salesperson job performance while sales orientation did not have a significant relationship with salesperson job performance. An insufficient number of studies are available that utilized the SO and CO facets separately to allow us to analyze them separately in the meta-analysis presented herein.

In spite of our extensive search, we were able to find only sixteen empirical studies with seventeen effect sizes ($k = 17$) showing the relationship between the two dimensions of SOCO and salesperson job performance. These studies contained responses from 3,477 respondents (Table I). The question is, is this a serious limitation? We argue that the number of studies is adequate for two reasons. First, over 255 effect sizes (fail-safe-n) with a correlation of zero would be required to bring the positive relationship between SOCO and job performance to 0.01 (Rosenthal, 1979). Second, adequate power for constructing confidence intervals and for testing moderation may be achieved with meta-analytic studies containing as few as 5 effect sizes ($k = 5$) and responses from less than 1,000 individuals ($n = 1,000$) (Cohn and Becker, 2003; Harwell, 1997).

Although the sample size is more than sufficient to perform the meta-analysis, this small number of studies does pose certain problems. First, as mentioned we were not able to differentiate the relationship between the two individual facets of SOCO and job performance of salespeople. Second, our χ^2 statistic suggests the existence of moderating factors on the relationship between SOCO and job performance. We investigated and ruled out the moderating effects of customer type (B2C or B2B) and type of job performance measures (subjective or objective). However, other potential moderators certainly exist, including type of salesperson compensation/reward system, national culture (individualism, collectivism), organizational culture, and others. Future research across diverse settings and cultures is required to investigate these moderators. One final potential issue is that self-reported attitudinal and behavioral measures such as SOCO and job performance may be influenced by the social desirability bias of the respondent, which might have distorted the findings of this study (see Jaramillo *et al.*, 2003).

References

Arthur, W. Jr, Bennett, W. Jr and Huffcutt, A.I. (2001), *Conducting Meta-Analysis Using SAS*, Lawrence Erlbaum, Mahwah, NJ.

Bass, K.E., Hebert, F.J. and Tomkiewicz, J. (2003), "Real estate professionals' customer orientation and sales performance", *Business Quest: A Web Journal of Applied Topics in Business and Economics*, available at: www.westga.edu/ ~ bquest/bqheading

Boles, J.S., Babin, B.J., Brashear, T.G. and Brooks, C. (2001), "An examination of the relationships between retail work environments, salesperson selling orientation-customer orientation and job performance", *Journal of Marketing Theory and Practice*, Vol. 9 No. 3, pp. 1-13.

Bosworth, M.T., Page, R. and Sherman, S. (2003), *Solution Selling: Creating Buyers in Difficult Selling Markets*, McGraw-Hill, New York, NY.

Brown, S.P. and Peterson, R.A. (1993), "Antecedents and consequences of salesperson job satisfaction", *Journal of Marketing Research*, Vol. 30 No. 1, pp. 63-78.

Brown, G., Widing, R.E. and Coulter, R.L. (1991), "Customer evaluation of retail salespeople utilizing the SOCO scale: a replication, extension, and application", *Journal of the Academy of Marketing Science*, Vol. 19 No. 4, pp. 347-51.

Cano, C.R., Carrillat, F. and Jaramillo, F. (2004), "A meta-analysis of the relationship between market orientation and business performance: evidence from five continents", *International Journal of Research in Marketing*, Vol. 21 No. 2, pp. 179-200.

Caruso, J.C. (2000), "Reliability generalization of the neo personality scales", *Educational and Psychological Measurement*, Vol. 60 No. 2, pp. 236-54.

Chakrabarty, S., Brown, G., Widing, R. and Conrad, C. (1997), "Selling behaviors and sales performance: SOCO and ADAPTS", *Advances in Marketing: Proceedings of the Southwestern Marketing Association*, pp. 203-208.

Churchill, G.A., Ford, N.M., Hartley, S.W. and Walker, O.C. (1985), "The determinants of salesperson performance: a meta-analysis", *Journal of Marketing Research*, Vol. 22 No. 2, pp. 103-18.

Cohn, L.D. and Becker, B.J. (2003), "How meta-analysis increases statistical power", *Psychological Methods*, Vol. 8 No. 3, pp. 243-53.

Dadzie, K.Q., Johnston, W.J., Dadzie, E.W. and Yoo, B. (1999), "Influence in the organizational buying center and logistics automation technology adoption", *Journal of Business & Industrial Marketing*, Vol. 14 Nos 5/6, pp. 433-49.

Daniel, K. and Darby, D.N. (1997), "A dual perspective of customer orientation: a modification, extension and application of the SOCO scale", *International Journal of Service Industry Management*, Vol. 8 No. 2, pp. 131-247.

Donaldson, S.I. and Grant-Vallone, E.J. (2002), "Understanding self-report bias in organizational behavior research", *Journal of Business and Psychology*, Vol. 17 No. 2, pp. 245-70.

Dunlap, B.J., Dotson, M.J. and Chambers, T.M. (1988), "Perceptions of real-estate brokers and buyers: a sales-orientation, customer-orientation approach", *Journal of Business Research*, Vol. 17 No. 2, pp. 175-87.

Ehert, M. (2004), "Managing the trade-off between relationships and value networks: towards a value-based approach for customer relationship management in business-to-business markets", *Industrial Marketing Management*, Vol. 33 No. 6, pp. 465-73.

Flaherty, T.B. (1999), "An investigation of the selling situation and customer-oriented selling", Noble, C.E. (Ed.), *Proceedings of the Academy of Marketing Science*, Boston, MA, Vol. 22, pp. 435-441.

Fern, E.F. and Monroe, K.B. (1996), "Effect-size estimates: issues and problems in interpretation", *Journal of Consumer Research*, Vol. 23 No. 2, pp. 89-105.

Ford, N.M., Orville, C., Walker, J. and Churchill, G.A. (1987), *Selecting Successful Salespeople: A Meta-Analysis of Biographical and Psychological Criteria*, American Marketing Association, Chicago, IL.

Franke, G.R. (2001), "Applications of meta-analysis for marketing and public policy: a review", *Journal of Public Policy and Marketing*, Vol. 20 No. 2, pp. 186-200.

Gillis, C., Pitt, L., Robson, M.J. and Berthon, P. (1998), "Communication in the salesperson/customer dyad: an empirical investigation", *Marketing Intelligence & Planning*, Vol. 16 No. 2, pp. 100-6.

Goff, B.G., Boles, J.S., Bellenger, D.N. and Stojack, C. (1997), "The influence of salesperson selling behaviors on customer satisfaction with products", *Journal of Retailing*, Vol. 73 No. 2, pp. 171-83.

Harwell, M. (1997), "An empirical study of Hedge's homogeneity test", *Psychological Methods*, Vol. 2 No. 2, pp. 219-31.

Hart, S.H. (1984), "An empirical investigation of salespeople's behavior, effort, and performance during sales contests", dissertation, Texas A&M University, College Station, TX.

Henard, D.H. and Szymanski, D.S. (2001), "Why some products are more successful than others", *Journal of Marketing Research*, Vol. 38 No. 3, pp. 362-75.

Herche, J. and Engelland, B. (1996), "Reversed-polarity items and scale unidimensionality", *Academy of Marketing Science*, Vol. 24 No. 4, pp. 366-74.

Holmes, T.L. and Srivastava, R. (2002), "Effects of job perceptions on job behaviors: implications for sales performance", *Industrial Marketing Management*, Vol. 31 No. 5, pp. 421-8.

Houston, F.S. (1986), "The marketing concept: what it is and what it is not", *Journal of Marketing*, Vol. 50 No. 2, pp. 81-7.

Howe, V., Hoffman, K.D. and Hardigree, D.W. (1994), "The relationship between ethical and customer-oriented service provider behaviors", *Journal of Business Ethics*, Vol. 13 No. 7, pp. 497-506.

Hunter, J.E. and Schmidt, F.L. (2004), *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*, 2nd ed., Sage Publications, Newbury Park, CA.

Jaramillo, F. (2004), "The effect of action and state orientation on salesperson's job performance", dissertation, University of South Florida, Tampa, FL.

Jaramillo, F., Carrillat, F.A. and Locander, W.B. (2003), "Starting to solve the method puzzle in salesperson self-report evaluations", *Journal of Personal Selling & Sales Management*, Vol. 23 No. 4, pp. 367-75.

Jaramillo, F., Mulki, J.P. and Marshall, G.W. (2005), "A meta-analysis of the relationship between organizational commitment and salesperson job performance", *Journal of Business Research*, Vol. 58 No. 6, pp. 705-14.

Johnston, M.W. and Marshall, G.W. (2005), *Relationship Selling & Sales Management*, 2nd ed., McGraw-Hill/Irwin, Boston, MA.

Joshi, A.W. and Randall, S. (2001), "The indirect effects of organizational controls on salesperson performance and customer orientation", *Journal of Business Research*, Vol. 54 No. 1, pp. 1-9.

Judge, T.A. and Piccollo, R.F. (2004), "Transformation and transactional leadership: a meta-analytic test of their relative validity", *Journal of Applied Psychology*, Vol. 89 No. 5, pp. 755-69.

Keillor, B.D., Parker, R.S. and Pettijohn, C.E. (2000), "Relationship-oriented characteristics and individual salesperson performance", *Journal of Business & Industrial Marketing*, Vol. 15 No. 1, pp. 7-22.

Kelley, S.W. (1988), "A demonstration of generalizability theory procedures through the assessment of the psychometric properties of the SOCO scale", in Summey, J.H. and Hensel, P.J. (Eds), *Proceedings of the Southern Marketing Association*, Southern Illinois University, Carbondale, IL.

Kirka, A.H., Jayachandran, S. and Bearden, W.O. (2005), "Market orientation: a meta-analytic review and assessment of its antecedents and impact on performance", *Journal of Marketing*, Vol. 59 No. 2, pp. 24-41.

Kline, R.B. (2004), *Beyond Significance Testing. Reforming Data Analysis Methods in Behavioral Research*, American Psychological Association, Washington, DC.

Krishna, A., Briesch, R., Lehmann, D.R. and Yuan, H. (2002), "A meta-analysis of the impact of price presentation on perceived savings", *Journal of Retailing*, Vol. 78 No. 2, pp. 101-18.

Leigh, T.W., Pullins, E.B. and Comer, L.B. (2001), "The top ten sales articles of the 20th century", *Journal of Personal Selling & Sales Management*, Vol. 21 No. 3, pp. 217-27.

Levy, M. and Weitz, B.A. (2003), *Retailing Management*, McGraw-Hill/Irwin, Boston, MA.

Lindell, M.K. and Whitney, D.J. (2001), "Accounting for common method variance in cross-sectional research designs", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 114-21.

Lipsey, M.W. and Wilson, D.B. (2001), *Practical Meta-Analysis*, Sage Publications, Thousand Oaks, CA.

McIntyre, R.P., Claxton, R.P., Anselmi, K. and Wheatley, E.W. (2000), "Cognitive style as an antecedent to adaptiveness, customer orientation, and self-perceived selling performance", *Journal of Business and Psychology*, Vol. 15 No. 2, pp. 179-96.

MacKenzie, S.B., Podsakoff, P.M. and Ahearne, M. (1998), "Some possible antecedents and consequences of in-role and extra-role salesperson performance", *Journal of Marketing*, Vol. 62 No. 3, pp. 87-98.

Martin, C.A. (2001), "Customer oriented selling: an empirical examination of organizational and individual antecedents, and performance outcomes", dissertation, University of Memphis, Memphis, TN.

Michaels, R.E. and Day, R.L. (1985), "Measuring customer orientation of salespeople: a replication with industrial buyers", *Journal of Marketing Research*, Vol. 22 No. 4, pp. 443-6.

Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, McGraw-Hill, New York, NY.

O'Hara, B.S., Boles, J.S. and Johnston, M.W. (1991), "The influence of personal variables on salesperson selling orientation", *The Journal of Personal Selling & Sales Management*, Vol. 11 No. 1, pp. 61-7.

Overton, R.C. (1998), "A comparison of fixed-effects and mixed (random-effects) models for meta-analysis test of moderator variable effects", *Psychological Methods*, Vol. 3, pp. 354-79.

Pettijohn, C.E., Pettijohn, L.S. and Parker, R.S. (1997), "An exploratory analysis of impact of salesperson customer-orientation on sales force productivity", *Journal of Customer Service in Marketing and Management*, Vol. 3 No. 4, pp. 5-24.

Pettijohn, C.E., Pettijohn, L.S. and Taylor, A.J. (2002), "The influence of salesperson skill, motivation, and training on the practice of customer-oriented selling", *Psychology and Marketing*, Vol. 19 No. 9, pp. 743-57.
Rackham, N. and De Vincentis, J.R. (1999), *Rethinking the Sales Force*, McGraw Hill, New York, NY.
Rich, G.A., Bommer, W.H., MacKenzie, S.B., Podsakoff, P.M. and Johnson, J.L. (1999), "Methods in sales research: apples and apples or apples and oranges? A meta-analysis of objective and subjective measures of salesperson performance", *The Journal of Personal Selling & Sales Management*, Vol. 19 No. 4, pp. 41-52.
Rosenthal, R. (1979), "The 'file drawer problem' and tolerance for null results", *Psychological Bulletin*, Vol. 86, pp. 638-41.
Rozell, E.J., Pettijohn, C.E. and Parker, S.R. (2004), "Customer-oriented selling: exploring the roles of emotional intelligence and organizational commitment", *Psychology and Marketing*, Vol. 21 No. 6, pp. 405-24.
Rust, R.T., Lemon, K.N. and Zeithaml, V.A. (2004), "Return on marketing: using customer equity to focus marketing strategy", *Journal of Marketing*, Vol. 68 No. 1, pp. 109-16.
Saxe, R. and Weitz, B.A. (1982), "The SOCO scale: a measure of the customer orientation of salespeople", *Journal of Marketing Research*, Vol. 19 No. 3, p. 343.
Schultz, R.J. and Good, D.J. (2000), "Impact of the consideration of future sales consequences and customer-oriented selling on long-term buyer-seller relationships", *Journal of Business & Industrial Marketing*, Vol. 15 No. 4, pp. 200-15.
Sharma, A., Levy, M. and Kumar, A. (2000), "Knowledge structures and retail sales performance: an empirical examination", *Journal of Retailing*, Vol. 76 No. 1, pp. 53-69.
Siguaw, J.A. and Honeycutt, E.D.J. (1995), "An examination of gender differences in selling behaviors and job attitudes", *Industrial Marketing Management*, Vol. 24 No. 1, pp. 45-52.
Swenson, M.J. and Herche, J. (1994), "Social values and salesperson performance: an empirical examination", *Journal of the Academy of Marketing Science*, Vol. 22 No. 3, pp. 283-9.
Tadepalli, R. (1995), "Measuring customer orientation of a salesperson: modifications of the SOCO scale", *Psychology and Marketing*, Vol. 12 No. 3, pp. 177-87.
Thomas, R.W., Soutar, G.N. and Ryan, M.M. (2001), "The selling orientation-customer orientation (SOCO) scale: a proposed short form", *The Journal of Personal Selling & Sales Management*, Vol. 21 No. 1, pp. 63-9.
Vinchur, A.J., Schippmann, J.S., Switzer, F.S. and Roth, P.L. (1998), "A meta-analytic review of predictors of job performance for salespeople", *Journal of Applied Psychology*, Vol. 83 No. 4, pp. 586-97, (Washington).
Whitener, E.M. (1990), "Confusion of confidence intervals and credibility intervals in meta-analysis", *Journal of Applied Psychology*, Vol. 73 No. 3, pp. 315-21.
Widmier, S. (2002), "The effects of incentives and personality on salesperson's customer orientation", *Industrial Marketing Management*, Vol. 31 No. 7, pp. 609-15.
Williams, M.R. (1998), "The influence of salespersons' customer orientation on buyer-seller relationship development", *The Journal of Business & Industrial Marketing*, Vol. 13 No. 3, pp. 271-89.

Appendix. Studies included in the meta-analysis sample

- Bass *et al.*, 2003;
- Boles *et al.*, 2001;
- Chakrabarty *et al.*, 1997;
- Dunlap *et al.*, 1988;
- Flaherty, 1999;
- Hart, 1984;
- Howe *et al.*, 1994;
- Jaramillo, 2004;
- Keillor *et al.*, 2000;
- McIntyre *et al.*, 2000;
- Martin, 2001;
- Pettijohn *et al.*, 1997;
- Rozell *et al.*, 2004;
- Saxe and Weitz, 1982;
- Siguaw and Honeycutt, 1995; and
- Swenson and Herche, 1994.

About the authors

Fernando Jaramillo received his PhD in Marketing from the University of South Florida in 2004. His research interests include sales force performance and marketing strategy. His work has been published in several journals including the *Journal of Personal Selling & Sales Management, International Journal of Research in Marketing, Journal of Business Research, Journal of Marketing Education,* and *Academy of Marketing Science Review.* Fernando Jaramillo is the corresponding author and can be contacted at: jaramillo@uta.edu

Daniel M. Ladik received his PhD in Marketing from the University of South Florida in 2003. His research interests include sales force turnover, sales force performance, technology-based self-service, and brand management. His work has been published in *Industrial Marketing Management*, *Quarterly Journal of Electronic Commerce*, and the *Journal of Market-Focused Management.*

Greg W. Marshall received his PhD in Marketing from Oklahoma State University. His industry experience includes managerial positions with companies such as Mennen, Warner-Lambert, and Target Corporation. His research interests include sales force selection, performance, and evaluation; decision making by marketing managers; and intraorganizational relationships. He has published over 40 articles in a variety of refereed business journals.

Jay Prakash Mulki received his PhD in Marketing from the University of South Florida. His primary research interests are in the areas of personal selling and sales management. His research has been published in the *Journal of Business Research.*

Executive summary and implications for managers and executives

This summary has been provided to allow managers and executives a rapid appreciation of the content of this article. Those with a particular interest in the topic covered may then read the article in toto *to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.*

How many businesses these days advertise themselves as providing "solutions" rather than, as they used to, simply

emphasizing the goods and services they hope people will want or need to buy?

Whereas once you might see a vehicle and driver for hire, or a delivery or collection service offered, now you might have a variety of firms whose business is "logistical solutions."

We have "IT solutions" rather than a company selling computers, peripheral equipment and a back-up service. "Company solutions" might mean anything from providing extra labor to doing the accounts. And "Toy solutions" for people whose children have everything and the parents need some assistance in finding the latest "must have" plaything.

There are engineering solutions, drilling solutions, healthcare solutions, travel solutions, gardening solutions, advertising solutions, pet care solutions and many more. Just notice the number of commercial vehicles on the roads which have that word "solutions" somewhere in the company title or description and you'll realize how many people are out there just waiting and wanting to provide a solution to our problems – because a prerequisite for a solution is surely a problem to solve.

Its basis, of course, is in subtle marketing. Salespeople, and the people who employ them, are avoiding giving the impression that their primary aim is to part you from your hard-earned money. Instead, they are hoping for a sale to result from making you aware of how their products or services can address and satisfy needs that you have.

Thankfully, the benefits of helping customers by serving and advising them well, rather than the "hard sell", are well understood. Understanding customers' needs and helping them to get the most appropriate service or product, rather than bamboozling them by what used to be called "the tricks of the trade", is the essence of customer orientation.

While sales orientation occurs when salespeople are primarily concerned with "getting the sale", customer-oriented salespeople focus their efforts on understanding the customer's individual needs by helping them to identify alternatives, evaluate them, and then make the most satisfactory choice. Such customer-oriented efforts by salespeople are also aimed at increasing long-term customer satisfaction by avoiding those short-sighted tricks of the trade which are likely to jeopardize a lasting and valuable relationship with a customer.

In an effort to measure the degree to which salespeople engage in customer-oriented selling – information essential in assessing job performance in this area – the Selling Orientation-Customer Orientation (SOCO) scale was developed.

Although researchers have recognized the potential impact of SOCO on numerous variables that are important to an organization and its employees and customers, the present study is the first published SOCO meta-analysis.

SOCO is important for organizations since it impacts the adoption of innovative technology, job attitudes, turnover intentions, employee innovation, adaptive selling, employee relationships with supervisors, and organizational citizenship behavior. It also affects employees' attitudes such as job satisfaction, motivation, and organizational commitment. On the customer side, it influences customer relationship development, and satisfaction and loyalty.

Fernando Jaramillo *et al.*'s aim to estimate the strength of relationship between SOCO and salesperson job performance resulted in definitive finding of a significant positive relationship, although they were not able to differentiate the relationship between the two individual facets of SOCO and job performance of salespeople.

As the study also negates the presumption that SOCO's inherent attributes are applicable only in business-to-business (B2B) environments, retail sales organizations and other business-to-consumer (B2C) settings can also benefit from more attention to SOCO. A previously unanswered question was whether the relationship between SOCO and job performance was different in business-to-consumer and business-to-business sales situations.

It was thought that customer orientation may result in a higher performance in B2B than B2C selling because in B2B buying decisions are generally more complex and the salesperson is often perceived by the buyer as a trusted advisor who helps him or her in the decision-making process. Had this been true, it would imply that a customer's perception of salesperson value creation is greater in B2B than in B2C.

Despite their findings, the authors urge caution as firms begin to consider integrating SOCO into their culture and daily operations. As with so many variables related to performance, SOCO explains only about two percent of the overall variance in salesperson job performance. This result is in line with other studies that have investigated other antecedents of job performance including job satisfaction, job involvement, and customer orientation, each of which explains less than four percent of the variance in performance.

Instead, they support the argument that organizations should not focus on augmenting one or two variables shown to positively impact performance. Rather, in order to truly enhance their salespeople's performance, firms need to focus their attention on multiple factors that together create a performance-oriented culture. SOCO can be an important element in the performance success mix.

(A précis of the article "A meta-analysis of the relationship between sales orientation-customer orientation (SOCO) and salesperson job performance". Supplied by Marketing Consultants for Emerald.)