ORGANIZATIONAL BUYERS' PERCEIVED TRUST OF SALESPEOPLE: A U.S. AND SOUTH AMERICAN COMPARISON

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Trust has been shown to have a significant impact on buyers' evaluation and choice of suppliers in organizational purchase decisions. These findings, however, have typically been drawn from U.S.-based samples. Using samples of organizational buyers from the U.S. and South America, this article examines whether country-of-origin plays a role in buyers' perception of trust. A multidimensional measure of perceived trust was employed. Results show that South American buyers exhibit less perceived trust of salespeople than those buyers in the U. S. sample. In both samples, trust of the salesperson was the strongest factor amongst those salespeople that received orders. South American buyers were found to be much less trusting of the companies they do business with which suggests that personal relationships may be more important.

INTRODUCTION

Salesperson trust has been shown to positively affect organizational buying by impacting attitudes, intentions, and behavior (Swan, Bowers and Richardson 1999). Recently, it has also been shown to directly impact the buying decision (Plank, Reid and Pullins 1998). Yet despite the sixteen studies cited in Swan, Bowers, and Richardson's (1999) recent review and meta-analysis, no studies have examined trust perceptions using international samples.

This void is not limited to just trust but extends to much of the existing sales research. What makes this particularly disconcerting is that as businesses continue to expand their global operations, the need to understand how basic sales concepts vary across different contexts is critical. Only recently has sales research started to examine sales concepts using non-U.S. samples or multiple samples in an international context.

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Among the research using non-U.S. samples, for example, Babakus et al. (1996) have investigated the relationship among sales, management control, sales territory design, salesperson performance, and sales organization effectiveness using an Australian sample. In addition, Baldauf and Cravens (1999) looked at the effectiveness of field sales organizations using an Austrian sample.

Studies using multiple samples from different countries include Mintu-Wimsatt and Gassenheimer (2000), Money and Graham (1999), and Honeycutt et al. (1999). Mintu-Wimsatt and Gassenheimer examined the moderating effects of cultural context in buyer-seller negotiation using exporters from both the U.S. and the Philippines and found that cultural context moderates the relationship between negotiator's experience and negotiation style. Money and Graham (1999) developed a model of salesperson performance and satisfaction using data collected in Japan and the U.S. and found that culture moderates the relationship among the constructs. Specifically, pay and valence for pay play a more central role for Americans. Value congruence was shown to have a strong influence on job satisfaction for the Japanese. Few differences, however, were found by Honeycutt et al. (1999) in terms of the sales selection and sales training practices used by firms from China

and Slovakia. However, they did find differences between globally-oriented and domestic-based firms in each country.

Given that trust is seen as a key determinant in building customer relationships, the purpose of this paper is to examine whether differences, based on respondents' country-of-origin, exist in the perceptions of trust and its impact on buying behavior. We begin with a listing of the research questions addressed in this paper. This is followed by a description of the study methodology and sampling procedures. Next, the psychometric properties of the Plank, Reid and Pullins (1998) trust scale used in the study are examined. Differences between the two samples in terms of the components of trust are then examined. Differences in perceptions of trust relative to buyers that received orders versus those who did not are also examined. Implications of the differences are then discussed.

This study expands our understanding of trust in buyer-seller relationships in a number of ways. First, building on the work of Plank, Reid and Pullins (1999), trust is defined as a multi-dimensional construct consisting of three dimensions: trust of the salesperson, trust of the company, and trust of the product. Previous work has focused on trust of the salesperson only. Second, this study represents the first to examine buyer-seller trust from a multi-country perspective.

STUDY METHODOLOGY

In conducting this study we were concerned with addressing the following research questions:

- Would the trust scale differ psychometrically across the two samples?
- Does perceived trust differ across the two samples?
- Are there differences in the relative importance of salesperson trust, product/service trust, and company trust across the two samples?
- Does the trust-performance relationship differ across the two samples?

For the U.S. sample, a national sample was drawn from members of the National Association of Purchasing Management. Two questionnaires were used with the only difference being that one asked the buyer to evaluate a salesperson who received an order and the other asked the respondent to evaluate a salesperson who did not receive an order.

An equal number of both questionnaires were sent out by randomly dividing the sample between the two questionnaires. A total of 1600 mailings were made with 1588 being deliverable. We received 481 responses for a 30.3 percent response rate. Of the returned questionnaires, 251 were for those salespeople that had received an order and 230 were for salespeople who had not.

In order to collect the data in South America, some minor adjustments had to be made. First, the questionnaire was rewritten in Spanish. To ensure that the translation was correct the questionnaire went through a translation and back-translation procedure (Herche, Swenson and Verbeke 1996). In addition, following research by Plank (1998), a small focus group of South Americans was conducted to examine each of the measures for validity in Spanish. These findings suggested the definitions and measures were appropriate. Minor concerns regarding questionnaire wording were identified but were felt to be within acceptable bounds.

This study was conducted in two countries in South America, Columbia and Chile. A total of 1800 companies were identified from several sources. Surveys sent to respondents were randomly divided in terms of the two questionnaires. As with the U.S. sample, all of the respondents in the South America sample were all from the purchasing function. A total of 688 usable questionnaires were received for a 38.22 percent response rate. Of these, 327 (47.53 percent) were for those salespeople who had received an order and 361 (52.47 percent) were for salespeople who had not.

Both samples used the nonresponse bias methodology suggested by Armstrong and Overton (1977), and in both cases results suggested little or no nonresponse bias (first quartile and last quartile respondents were not statistically different on any of the parameters tested). The demographics of the respondents were fairly

similar. Both samples were dominated by respondents who worked for manufacturing enterprises, but more so for the U.S. sample (65.4 percent versus 35 percent). While both samples had predominately male respondents, the U.S. sample had roughly 30 percent female respondents and the South American sample had 26.5 percent females. Work experience was similar for both samples. Work experience for the U.S. respondents was a mean 14.33 years (std. dev. = 8.18), while for the South American respondents the mean was 11.50 years (std. dev. = 5.28).

ANALYSIS

Scale Evaluation

Following Plank, Reid and Pullins' (1999) methodology, the scale was subjected to psychometric evaluation using confirmatory factor analysis. Table 1 provides the data from the two data sets used in this study as well as the data provided in Plank, Reid and Pullins (referred to hereafter as PRP). A list of the items used to measure trust is contained in an Appendix.

As with many scales we failed to get pure replication in either data set. As in the original PRP article, the full fifteen item three-factor model did not fit. In order to get psychometrically valid models, indicators which did not fit the data had to be removed resulting in modified models for each of the two data sets. The U.S. data set provided a ten-item scale for the three constructs that fit somewhat better than the original PRP data. With the exception of several standardized residuals, all fit statistics were marginally better. However, average variance extracted was somewhat lower, .62 versus .72 for the PRP data. On examining the items that loaded, seven of the ten indicators were the same for both data sets.

The South American data also provided an adequate scale, but with only eight items loading. The data fit the revised model well, but again there were some standardized residuals evident. Average variance extracted was .59, acceptable, but lower than the original PRP sample and the U.S. sample noted above.

Taken together the multidimensional measure of trust within both data sets fits reasonably well. Therefore, the trust measure can be deemed reliable and valid for the purposes set forth in this paper.

Perceived Trust

Table 2 provides an analysis of the degree of perceived trust, salesperson trust, product/service trust, and company trust as defined by PRP (1999). Within the two data sets tested, the validated models do not utilize the same indicators, or even the same number of indicators. Therefore, to compare across the two samples we employed the following procedure. For each data set we created new summed variables for each of the three sub-constructs of trust and an overall summed measure of trust. We then divided this score by the maximum possible score a respondent could have, creating a variable that represents a percentage of the maximum possible score, regardless of what that total might have been. Therefore the range of responses for each scale is from zero to one and can be compared directly across data sets. Trust was originally scaled on a one to five basis with one representing a high level of trust and five representing a low level of trust. Therefore, perceived trust scores near zero on the adjusted variables represent higher levels of trust.

There is an immediate trend apparent in the data. The levels of trust are much lower in the South American sample. A second trend is that it appears that there is a wider gap between trust for those salespeople that received the order versus those that did not, at least as judged by the size of the F values in the analysis of variance. In all cases they are larger for the South American sample. In both samples, product trust seems to be the smallest individual differentiator between salespeople receiving the order and those who did not. Salesperson trust appears to be the largest with company trust being in the middle for both samples.

Given that the dependent variable is dichotomous, a final analysis using logistic regression analysis was done with receiving an order versus not receiving an order being the dependent variable. The independent variables were salesperson trust, product trust, and company trust. Table 3 reports the results.

TABLE 1
Results of Confirmatory Factor Analysis of the Trust Scale

A. Preliminary Model Results all 15 indicators

	PRP	**US Sample**	**SA Sample**
# of Indicators	15	15	15
AGFI	.76	.894	.867
CFI	.86	.946	.936
RMSEA	.15	.069	.083
Chi-Square	P = .00 417.18/44DF	P = .00 274.62/87DF	P = .00 481.50/87DF
Std Residuals > 2.58	Not Reported	16	24

B. Final Model Results

# of Indicators	10	10	8
AGFI	.95	.971	.968
CFI	.98	.996	.989
RMSEA	.058	.024	.048
Chi-Square	P = .00 86.95	P = .128 41.13/32DF	P = .000 42.64/17DF
SP TRUST Indicators	1,4,7	1,4,10	1,7,14
PR Trust Indicators	8,12,15	2,8,12,15	8,12
CO Trust Indicators	3,6,11,13	3,6,9	3,6,13
Std Residuals >2.58	0	2	3

TABLE 2
Means and Standard Deviations of Trust Factor Scores for Both Samples

	US Sample		South American Sample	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Salesperson Trust				
Full Sample	.541	.203	.591	.168
SP Received Order	.438	.137	.472	.078
SP No Order	.653	.204	.710	.152
ANOVA	F = 188.00 P = .000		F = 600.93 P = .000	
Company Trust				
Full Sample	.399	.178	.644	.141
SP Received Order	.317	.118	.572	.106
SP No Order	.489	.189	.710	.138
ANOVA	F = 144.97 P = .000		F = 213.38 P = .000	
Product/service Trust				
Full Sample	.519	.125	.660	.155
SP Received Order	.496	.103	.607	.143
SP No Order	.545	.141	.710	.149
ANOVA	F = 18.91 P = .000		F = 85.41 P = .000	
Total Trust				
Full Sample	.489	.136	.628	.135
SP Received Order	.424	.090	.544	.067
SP No Order	.559	.142	.706	.136
ANOVA	F = 154.17 P = .000		F = 385.45 P = .000	

TABLE 3
Logistic Regression of Perceived Trust on Sales Outcomes United States Sample

-2 Log Likelihood	477.41*		
Goodness of fit	486.99*		
Parameter Estimates			
Variable	B	Wald	Significance
Salesperson Trust	5.09	37.90	.000
Product/service Trust	-1.94	3.03	.081
Company Trust	4.56	20.26	.000
Classification Table			
	Predicted		
Observed	SP Received Order	SP No Order	
SP Received Order	206	39	84.08%
SP No Order	71	152	68.16%
Overall			76.50%
South American Sample			
-2 Log Likelihood	542.64*		
Goodness of fit	658.61*		
Parameter Estimates			
Variable	B	Wald	Significance
Salesperson Trust	14.10	137.29	.000
Product/service Trust	1.94	3.83	.050
Company Trust	-1.41	1.21	.271
Classification Table			
	Predicted		
Observed	SP Received Order	SP No Order	
SP Received Order	287	43	86.97%
SP No Order	74	284	79.33%
Overall			82.99%

*Significant at P <.0000

For both samples, the models predict better for salespeople receiving the order versus those that did not. The predictive rate, however, was somewhat higher for the South American sample. In both cases salesperson trust is the most important facet of the model. In the South American sample product trust is statistically significant, whereas company trust is clearly not a factor. In the United States sample, company trust was found to be very significant, while product trust was not.

DISCUSSION AND LIMITATIONS

Several points bear additional discussion. First, the trust measure, while not perfect, is replicable in the sense that the three theoretical construct components are exhibited in the final models, all indicators load in the constructs they were created for, and the final models exhibit sufficient psychometric properties to be deemed valid and reliable. However, the scale does not exhibit the same indicators in all models. This suggests that the replications of the original scale presented here can provide a good measure of trust as defined, but it is incumbent on the researcher to validate it each time prior to any hypotheses testing. Thus, in answer to the first research question we posed, there are differences in how trust is perceived but they are likely to be operational definition issues. The basic theoretical definition appears sound and was able to be measured reasonably well in both samples.

The second question asked whether perceived trust differs across the two samples. Our analysis demonstrated that the overall level of trust was much lower in the South American sample. Further, the difference in trust between sales people who got the order versus those who did not was also wider in the South American sample. Clearly, our findings show that differences exist in the perceptions of perceived trust across the two samples. Further research is needed to examine the underlying reasons for these differences. Some possibilities for these differences may lie in the differences in culture or the business environment.

Our third research question asked whether there are differences in the relative importance in the objects of trust between the two samples. In both cases salesperson trust is the most important differentiator, but was much higher in the South American sample. This may suggest that personal relationships between buyer and seller are more important for South American buyers versus those in the U.S. This is particularly relevant given the low level of company trust exhibited by the South American sample. The most noticeable difference with respect to the objects of trust was that the South American respondents had a much lower level of company trust even for the companies that got the order.

The fourth research question asked whether the trust-performance relationship differed across the two samples relative to those instances where the order was received and those where it was not. As was shown in Table 3, salesperson trust was the most critical predictor in terms of those who received the order in both samples. However, product/service trust was a predictor in the South American sample, whereas it was not in the U.S. sample. Company trust was a strong predictor in the U.S. sample, but was not in the South American sample. Thus, there appear to be differences in the trust factors that drive sales outcomes. Further research is needed to explore these differences.

As with every study, this study has its limitations. While multiple samples were employed, it is always possible that the samples may not be representative of the sample frame or population. As is the case with all survey research, the research design relied on the memory of the respondents and therefore is subject to possible recall issues. No cause and effect can be inferred from the study due to its cross-sectional research design. In addition, it should be kept in mind that PRP reported significant correlation between the trust components (44 percent to 83 percent). These current samples exhibited similar, but somewhat lower co-linearity (40 percent to 62 percent). Differences exhibited in this study may also be the result of differences in the indicators across samples used to operationalize the various aspects of trust.

CONCLUSION

As has been suggested in previous research, trust is an important factor in selling. This research suggests that different cultures may very well differ in terms of the importance of trust in general and in the objects of trust.

It appears, from this study, that South American buyers are less trusting overall than their U.S. counterparts and place greater value on trust at the salesperson's level.

REFERENCES

Armstrong, J. Scott and T. S. Overton (1977), "Estimating NonResponse Bias in Mail Surveys," *Journal of Marketing Research* ,14(3), 396-402.

Babakus, E., D. W. Cravens, K. Grant, T. N. Ingram and R. W. LaForge (1996), "Investigating the Relationships Among Sales, Management Control, Sales Territory Design, Salesperson Performance, and Sales Organizational Effectiveness," *International Journal of Research in Marketing*,13(4), 345-363.

Baldauf, A. and D.W. Cravens (1999), "Improving the Effectiveness of Field Sales Organizations: A European Perspective," *Industrial Marketing Management*, 28(1), 63-72.

Hersche, J., M. Swenson and W. Verbeke (1996), "Personal Selling Constructs and Measures: Emic Versus Etic Approaches to Cross National Research," *European Journal of Marketing*, 30 (7), 83-97.

Honeycutt, E.D., J.B. Ford, R.A. Lupton and T.B. Flaherty (1999), "Selecting and Training the International Sales Force: Comparison of China and Slovakia," *Industrial Marketing Management*, 28(6), 627-635.

Mintu-Wimsatt, A. and J. B. Gassenheimer (2000), "The Moderating Effects of Cultural Context in Buyer-Seller Negotiation," *Journal of Personal Selling and Sales Management*, 20(1), 1-9.

Money, R. B. and J. L. Graham (1999), "Salesperson Performance, Pay and Job Satisfaction: Tests of a Model Using Data Collected in the United States and Japan," *Journal of International Business Studies*, 30(1), 149-172.

Plank, R. E. (1998), "The Emic versus Etic Dilemma in Cross Cultural Marketing Research: A Personal Construct Theory Perspective," *Midwest Marketing Association Proceedings*, 80-84.

Plank, R. E., D. A. Reid and E. Bolman Pullins (1999), "Perceived Trust in Business-to-Business Sales: A New Measure," *Journal of Personal Selling and Sales Management*, 19(3), 61-72.

Swan, J. E., Bowers, M. R. and Richardson, L. D. (1999), "Customer Trust in the Salesperson: An Integrative Review and Meta-Analysis of the Empirical Literature," *Journal of Business Research*, 44(2), 93-107.

APPENDIX
Measures of Trust

T_1	This salesperson did everything possible for our company (SPTR)
T_2	The product/service will not meet our needs without question (PRTR)
T_3	The company this salesperson works for will stand behind us (COTR)
T_4	This salesperson will always use good judgment (SPTR)
T_5	This product/service has the technical attributes necessary to do the job (PRTR)
T_6	The company can be counted upon to do right with us (COTR)
T_7	The salesperson is not a real expert (SPTR)
T_8	The product/service will give us little trouble in use (PRTR)
T_9	This salesperson's company has quality people working for them (COTR)
T_{10}	The salesperson is like a good friend (SPTR)
T_{11}	The salesperson's company has a poor reputation (COTR)
T_{12}	The product/service will please all those in our company who use it or are responsible for it (PRTR)
T_{13}	The company will do what it takes to make us happy (COTR)
T_{14}	When the salesperson tells me something it must be false (SPTR)
T_{15}	This product/service will do everything we want it to do (PRTR)

SPTR=Trust of salesperson COTR=Trust of company PRTR=Trust of product/service; The identification of these subscales did not appear in the actual questionnaire. Underlined statements are reverse scored.

Note: Questions T_2, T_5, T_9, T_{10}, and T_{14} are not indicators in the final Plank, Reid, Pullins validated scale. Questions T_5, T_7, T_{11}, T_{13}, and T_{14} are not indicators in the final U.S. sample. Questions T_2, T_4, T_5, T_9, T_{10}, T_{11}, and T15 are not indicators in the final South American sample.