This study replicates and extends Crosby, Evans, and Cowles (1990) relationship quality model. It examines the antecedents and consequences of relationship quality between a salesperson and his or her customer using business customers rather than the sample of retail consumers used by Crosby and colleagues. The original study is further extended by the inclusion of equity as a predictor of buyer–salesperson relationship quality. The setting for this replication is a sales environment where a continuous service is sold to business customers. Approximately 1,000 customers responded to the survey instrument. These respondents represent a wide range of organizations including manufacturers, government agencies, retailers, and service firms. Findings from the current study suggest that the Crosby and co-workers model of relationship quality is relatively generalizable to different sales settings. This is indicated by the fit indices for this replication in a business-to-business sales setting (AGFI = 0.93; CFI = 0.96; RMR = 0.05). Although our research indicates several differences from those reported in Crosby et al., their results are generally supported. Of the eight possible common relationships tested in the replication, six were significant (p < 0.05). Furthermore, the extension proposed by our research is significant. Equity is shown to be a significant predictor of buyer-salesperson relationship quality. Fit for the extended model is good (AGFI = 0.93; CFI = 0.96; RMR = 0.05). The two relationships that were different between our replication and the original study indicate that relationship quality is more important for the business-to-business customer in determining how highly they rate a salesperson than it is for consumers. Furthermore, these findings indicate that individual consumers place greater value on salesperson expertise in determining their evaluation of a salesperson’s effectiveness. Overall, the Crosby et al. model exhibits some degree of generalizability in the sales environment investigated in this replication. Implications of the study for building buyer–salesperson relationship are discussed, and suggestions are made concerning for future research topics. J BUSN RES 2000. 48:75–81. © 2000 Elsevier Science Inc. All rights reserved.

Buyer–seller relationships and their role in marketing is becoming one of the most discussed topics in the marketing literature (e.g. Kumar, Scheer, and Steenkamp, 1995; Morgan and Hunt, 1994). Business relationships have taken on increased importance with the advent of continuous improvement strategies that limit the number of suppliers used by a firm. Building close business relationships offers benefits to both the supplier and customer. To the selling firm, benefits include greater barriers to entry for their competitors and a stable market for the firm’s products (e.g. Ganesan, 1994; Jackson, 1985). Customer benefit by receiving products in short supply, best prices, and improved service from the vendor (Dyer and Ouchi, 1993).

In many settings a salesperson, because of his or her closeness to customers, is central to the development of strong buyer–seller relationships (Levitt, 1983; Macintosh, Anglin, Szymanski, and Gentry, 1992). The salesperson is in position to be a relationship manager. He or she is responsible for ensuring that the initial contacts are sufficiently rewarding to the buyer so that the buying firm will expand the scope of their business with the supplier (Crosby, Evans, and Cowles, 1990; Levitt, 1983). When the salesperson’s central role in developing these relationships is considered, it is surprising that relatively few studies have examined what salespeople can do to establish strong customer relationships (e.g. Crosby, Evans, and Cowles, 1990; Macintosh, Anglin, Szymanski, and Gentry, 1992).

Previous research on business relationships has generated great interest and has examined a variety of issues (e.g. Morgan and Hunt, 1994; Ganesan, 1994). However, prior studies have
The relationship literature suggests that equity may be only one new hypothesis— from equity to relationship quality. In addition, the current study typically examined different constructs or, if examining the same constructs, the measures used are often unlike those in previous research. Although these studies broaden our knowledge regarding buyer–seller relationships, without replication, the generalizability of this prior research is limited. Previous research that examined the salesperson’s role in building relationships with customers has indicated a need for further study (Macintosh, Anglin, Szymanski, and Gentry, 1992). Crosby, Evans, and Cowles (1990) call for additional research to re-examine and extend their model of relationship quality.

Undoubtedly, Crosby, Evans, and Cowles (1990) is an important study in the areas of relationship marketing and services. Since its publication, the Crosby and colleagues’ study has been referenced extensively in other research examining buyer–seller relationships (over 37 citations in 5 years) in some of the leading marketing journals (e.g. Berry and Parasuraman, 1993; Keaveney, 1995; Mittal and Lasser, 1996; Sheth and Parvatiyar, 1995). This indicates that it is a study worthy replicating in a different setting.

The goals of this replication study are twofold. First, it replicates Crosby, Evans, and Cowles (1990) model of relationship quality. Second, the study extends the original work in two ways. It uses a sample of business customers rather than consumer purchasers. In addition, the current study adds an equity construct to its model as an antecedent of relationship quality. By replicating and extending the Crosby and co-workers’ study, this research will help determine the generalizability of their relationship quality model. In addition, it should yield new insight about buyer–salesperson relationships in business settings.

**The Crosby, Evans, and Cowles (1990) Study**

Crosby, Evans, and Cowles (1990) developed and tested a model that examines the antecedents and consequences of relationship quality (See Figure 1). Their research sought to determine the effects of customer–salesperson similarity, salesperson expertise, and the use of relational selling behaviors by the salesperson on a customer’s perceived level of relationship quality between themselves and their life insurance salesperson. The Crosby and colleagues’ model examined the role relationship quality plays in influencing customer perceptions of salesperson effectiveness and the customer’s level of anticipated future interactions with the salesperson. The study was a pioneering effort. It represents the first major attempt to develop and empirically test a model of the antecedents and consequences of buyer–salesperson relationship quality.

Crosby, Evans, and Cowles (1990) findings supported several of their hypothesized relationships. For example, both salesperson expertise and use of relational selling behaviors were found to increase relationship quality. Their results also indicated that relationship quality increased a customer’s likelihood of having future interactions with the salesperson. However, Crosby and colleagues found that relationship quality did not predict customer ratings of salesperson effectiveness. Figure 1 presents a comparison of Crosby and colleagues’ results to findings of the current research.

The chief research question in our replication and extension was whether the antecedents of relationship quality found in a consumer setting hold in a business-to-business setting. If the Crosby, Evans, and Cowles (1990) model is a generalizable depiction of the antecedents of buyer–salesperson relationship quality, then the relationships between constructs should be relatively consistent across different sales environments. However, the business-to-business selling environment may be markedly different from consumer selling. Selling to a business buyer can require considerably more knowledge, because a successful salesperson may have to understand the buyer’s business as well as his or her product and the competition’s offerings. In addition, antecedents of a buyer–salesperson relationship could be fundamentally different in the two selling environments. By testing Crosby and co-workers’ model in a business-to-business setting, our study adds a new dimension to what is known about relationship selling.

**Hypotheses**

Our research seeks to replicate and extend the Crosby, (1990) model by: (1) testing the originally hypothesized linkages with business customers; and (2) including equity as an antecedent of relationship quality. The current study basically tests the same model as tested in the original study. For a specific listing of the original study’s hypotheses, see Crosby, Evans, and Cowles (1990). (All paths originally hypothesized in the original study are included in Figure 1). This replication adds only one new hypothesis—from equity to relationship quality.

The relationship literature suggests that equity may be a key ingredient in developing strong relationships (e.g. Gundlach and Murphy, 1993; Oliver and Swan, 1989a). Suppliers with a reputation for treating buyers equitably are more trusted, and their business relationship with customers are expected to continue (Anderson and Weitz, 1992). According to Dwyer, Schurr, and Oh (1987), equity is perceived as an essential prerequisite for trust between a buyer and a salesperson.

Few studies have specifically examined the linkage between equity/fairness and relationship quality. One study indicated that customer perceptions of fairness had a positive impact on supplier–customer relationship quality (Kumar, Sheen, and Steenkamp, 1995). Other research suggests fairness is the dominant dimension of equity (Oliver and Swan, 1989a), which is a “key component in the maintenance of customer relationships” (Oliver and Swan, 1989b, p. 372). These studies suggest that fairness is a strong predictor of customer satisfaction—a key component in the Crosby, Evans, and Cowles (1990) conceptualization of relationship quality. Therefore, we hypothesize that:
Figure 1. Proposed Extension to the Crosby, Evans, and Cowles (1990) Relationship Quality Model (Crosby, Evans and Cowles (1990) path coefficients are in ( ); *construct not included in Crosby, Evans, and Cowles original study).

H1: Customer perceptions of equity in their dealings with a salesperson will increase their rating of relationship quality with the salesperson.

Examining this relationship, in addition to those proposed by Crosby and colleagues (1990) will extend current knowledge concerning the antecedents of relationship quality.

Research Methods

Sample
The sample for the current study was composed of business customers of a Fortune 500 communications firm. A random sample of 3,010 customers was taken from a mailing list provided by that firm. The average customer spent approximately $50,000 per year on the supplier's offering, which involved telecommunications services. Respondents represented a variety of firms, ranging from retail to manufacturing to government agencies. Surveys were mailed to the individual in each customer firm responsible for purchasing the service. A one dollar bill was attached to the questionnaire as an incentive to customers to respond. Completed questionnaires were returned by 1,009 buyers for a response rate of 33%. Nonresponse bias was assessed by comparing early and late respondents, following a procedure discussed in Armstrong and Overton (1977). No significant differences were found on any of the constructs used in the study, which suggests that nonresponse bias does not seem to be a problem.

Measurement
In replication research, measurement is a critical issue. For this reason, when possible, this study used measures identical to Crosby, Evans, and Cowles (1990). The measures assess the customer’s viewpoint about his or her salesperson from the supplier firm. Crosby and colleagues used several measures that were insurance industry-specific. Because our research was in a business-to-business setting, some measures had to be adapted, or new measures developed, to reflect accurately buyer beliefs in the replication’s sales setting. Correlations for the scales are shown in Table 1. Scale reliabilities are reasonably consistent with those reported by Crosby and co-workers.

Similarity was assessed using the three subscales used by Crosby, Evans, and Cowles (1990). These subscales assessed similarity between the salesperson and buyer in appearance (5 items), lifestyle (4 items), and status (3 items). Reliabilities for these scales were 0.91, 0.88, and 0.87, respectively.

Relational selling behaviors were assessed using the four subscales used by Crosby, Evans, and Cowles (1990). However, four of the 26 original items were dropped in the current study. Items that were dropped were relevant in a life insurance context but not in the current study’s business context. Three items that dealt with an account executive’s personal financial disclosure and one customer disclosure item dealing with a customer’s personal financial goals were deleted from the original measure. Reliabilities for these scales were 0.87, 0.75, 0.89, and 0.92 for cooperative intentions, buyer disclosure, account executive disclosure, and interaction intensity, respectively.

Relationship quality was measured in a manner identical to Crosby, Evans, and Cowles (1990). A three-item satisfaction scale (alpha = 0.98) and nine-item trust scale (alpha = 0.92) were used. The two scales were combined to form a measure of relationship quality, just as Crosby and colleagues did.

The five-item salesperson expertise scale used by Crosby, Evans, and Cowles (1990) was originally designed to assess an insurance salesperson’s knowledge about various life insurance products. In the current study, expertise was assessed using a three-item summed scale designed to gauge the customer’s evaluation of their salesperson’s knowledge of the supplier firm’s services. An exemplar item is “I feel my account...
Table 1. Construct Correlations

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<tr>
<th>Endogenous variable indicators</th>
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<td>Sales effectiveness</td>
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<td>Referrals</td>
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<td>Anticipation of future interaction</td>
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<tr>
<td>Similarity</td>
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<td>Expertise</td>
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<tr>
<td>Relational selling behaviors</td>
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<td>Equity</td>
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*All correlations are significant (p < 0.05) with the exception of the correlation of similarity with anticipation of future interaction and the correlation of similarity with referrals.

Results

Measurement Model

Our study used the same general approach taken by Crosby, Evans, and Cowles (1990) to assess measurement model fit. The replication model was analyzed with Lisrel VIII. Chi-square of the replication measurement model was 276.02 with 59 degrees of freedom (p = 0.001). The large chi-square value was not surprising, because the chi-square statistic in Lisrel has been shown to be a function of sample size (Cudek and Browne, 1983). Other fit statistics that are less sensitive to sample size indicate that the measurement model achieved an acceptable fit (GFI = 0.96; AGFI = 0.93; standardized RMR = 0.05; CFI = 0.97). Overall, our findings are very similar to those reported in the original Crosby and colleagues study.

Structural Model

Results of this study are presented in two sections. First, findings from the replication of the Crosby, Evans, and Cowles (1990) study are presented. The second section reports the results of including equity in the model as an additional antecedent of relationship quality.

REPLICATION. Overall, findings indicate that the structural model’s fit in the replication was somewhat similar to that reported by Crosby, Evans, and Cowles (1990). Fit indices indicate that the model represents a good fit (AGFI = 0.93; CFI = 0.96; RMR = 0.048). Table 2 presents a comparison of the results from the current study with those of Crosby and co-workers.

Before discussing the consistent relationships between the two studies, it is interesting to note the two that were different. The first difference concerns the expertise → sales effectiveness relationship that was significant in the study by Crosby, Evans, and Cowles (1990) but not in the replication study of business customers. The second difference in results between the current study and the original research by Crosby and colleagues involved the relationship quality → sales effectiveness linkage, which was significant in our replication.

One reason for the increased relationship between relationship quality and ratings of salesperson effectiveness could lie in the nature of the service being purchased in the current research. For respondents in our study, the service was essential to conducting their day-to-day business. Having a close working relationship with the salesperson could assist the buyer in achieving optimal value from the service. In addition, because special promotions and service upgrades were continually being offered, having a close relationship with the salesperson could have considerable potential to improve the customer’s operation and enhance their evaluation of the salesperson’s effectiveness.

Findings also indicate that salesperson knowledge is more important in evaluating salesperson effectiveness among life insurance customers than for buyers in the business-to-business setting. Obviously, knowledge is important in any sales setting. However, it may be more important to the rating of a salesperson by an individual consumer when the salesperson has only one chance to impress the customer. In a life insurance setting, a salesperson may only have one or two calls to make the sale. In contrast, a business-to-business salesperson may make multiple calls on an account in a competitive environment before closing a sale. Thus, salesperson knowledge may be critical to the first impression of the buyer in an insurance setting but not in a business-to-business setting. In fact, recent research indicates that service after the sale is more important than salesperson knowledge in developing quality relationships (Boles, Barksdale, and Johnson, 1996).
Although it is important to recognize the different findings in the two studies, a key to determining the generalizability of the Crosby, Evans, and Cowles (1990) model is to examine the consistency of findings between their results and those of this replication. Of the eight hypothesized relationships common to both studies (excluding the proposed extension), findings were consistent for six (75%) of the proposed relationships. Thus, we conclude that some linkages in the Crosby and co-workers’ model may be generalizable to other sales settings.

In both studies, the common relationships include the nonsignificant path between similarity and relationship quality and a significant link between similarity and sales effectiveness. Expertise served as an predictor of relationship quality for both life insurance buyers and customers of business services. Relational selling behaviors predicted relationship quality in both studies. Likewise, relationship quality predicted future purchase intentions for life insurance customers and business customers. Finally, the proposed link between sales effectiveness and future purchase intentions was nonsignificant in both studies.

**EQUITY AND REFERRALS.** In addition to replicating the Crosby, Evans, and Cowles (1990) study, we proposed an extension to their original model by incorporating equity as a predictor of relationship quality. Fit indices for our extended model indicate a good fit (AGFI = 0.93; CFI = 0.96; RMR = 0.048). As hypothesized in HI, equity is a significant predictor of relationship quality (p < .05). This finding was not surprising, given prior research that demonstrates equity’s positive effects on customer ratings of satisfaction with a salesperson (e.g. Oliver and Swan, 1989a, 1989b).

**Discussion**

Perceived buyer–seller similarity is an antecedent of salesperson effectiveness. If a customer believes a salesperson is similar to him or herself, then he or she views that salesperson as more effective. One reason for this may be that individuals with similar backgrounds have more in common and find it easier to communicate. However, similarity was not a predictor of relationship quality in either the original study or this replication. Evidently, something more substantive than buyer–seller similarity is required before a buyer feels he or she can communicate effectively enough to establish a high-quality relationship with a salesperson.

One difference between Crosby, Evans, and Cowles (1990) and the current study involves salesperson expertise. It seems that salesperson expertise is more important in determining salesperson effectiveness for individual consumers than for business customers. Perhaps consumers have had bad experiences with unprofessional salespeople that were not knowledgeable about their product or were unable to diagnose individual needs. In cases where this is true, a salesperson possessing a high degree of expertise may be perceived as more effective. Another possible reason for the different findings is that business buyers may be more knowledgeable about important product categories than the average consumer. In a business setting, a buyer is less likely to rely on a salesperson as his or her sole source of information and is, therefore, less likely to believe that a salesperson is effective simply because of knowledge or sales skills.

Relationship quality seems to be related to a salesperson’s expertise and the way he or she interacts with the customer (relational selling behaviors). This finding is true for both life insurance (Crosby, Evans, and Cowles, 1990) and business customers. It supports the results of other research linking expertise to relationship quality (Lagace, Dahlstrom, and Gassenheimer, 1991). To have an opportunity to form a relationship, a salesperson must exhibit some degree of professionalism. A customer will not spend the time or effort required to develop a business relationship with a salesperson who is not an expert in his/her field.

**Table 2. Structural Model Results**

<table>
<thead>
<tr>
<th>Model Parameter</th>
<th>Crosby, Evans and Cowles (1990)</th>
<th>Current Study (Replication)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>SE</td>
</tr>
<tr>
<td>Similarity → relationship quality</td>
<td>0.10</td>
<td>0.06</td>
</tr>
<tr>
<td>Similarity → sales effectiveness</td>
<td>0.30</td>
<td>0.09</td>
</tr>
<tr>
<td>Expertise → relationship quality</td>
<td>0.19</td>
<td>0.06</td>
</tr>
<tr>
<td>Expertise → sales effectiveness</td>
<td>0.22</td>
<td>0.09</td>
</tr>
<tr>
<td>Relational selling → relationship quality</td>
<td>0.35</td>
<td>0.08</td>
</tr>
<tr>
<td>Relationship quality → sales effectiveness</td>
<td>−0.06</td>
<td>0.16</td>
</tr>
<tr>
<td>Relationship quality → AFI</td>
<td>0.69</td>
<td>0.19</td>
</tr>
<tr>
<td>Sales effectiveness → AFI</td>
<td>0.26</td>
<td>0.26</td>
</tr>
<tr>
<td><strong>Extension in the current study</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity → relationship quality</td>
<td>Not tested</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

b These are from Table 3 Crosby, Evans, and Cowles (1990).

t-Values for the Crosby, Evans, and Cowles (1990) study were not reported in their original study but were calculated by dividing the estimate by SE.
The significant path between relational selling behaviors and relationship quality suggests that such salesperson behaviors and attitudes as disclosure and an expression of cooperative intentions are very important in making the customer feel that the salesperson is not merely after a short-term sale but is willing to help the customer address long-term needs. Relational selling behaviors also may be tapping into the communication issue previously mentioned with regard to buyer–salesperson similarity. It seems that salespeople who can match the interaction requirements of the customer can build better relationships. The importance of communication has been recognized in several prior salesforce studies (e.g., Schuster and Danes, 1986; Williams and Spiro, 1985).

In our replication, relationship quality is a predictor of salesperson effectiveness, although not in the Crosby, Evans, and Cowles study. For business buyers, salesperson effectiveness is based, in part, on the quality of the buyer–salesperson relationship. A possible reason for this difference is that buyers want to do business with salespeople and firms that are not only expert at their job (Crosby and colleagues, 1990), but also trustworthy (Dwyer, Schurr, and Oh, 1987; Dwyer and Oh, 1987). Superior relationship quality may allow a salesperson to better understand what the buyer is communicating, because he or she has conducted business with this individual in the past and has the buyer’s trust. Better communication allows a salesperson to know what the buyer expects and leads to better information exchange concerning buyer needs and what the salesperson’s firm can do to help. A salesperson who provides assistance in key areas is more likely to be perceived as effective.

For both Crosby, Evans, and Cowles (1990) and our current study, sales effectiveness did not affect future intentions to do business with a salesperson. However, relationship quality influences that construct. Being effective is not sufficient to get a buyer to commit to a continuous stream of business with a salesperson. Instead, a quality relationship with high levels of trust and satisfaction is required to guarantee that future business will transpire between the two parties.

In the current study, equity was found to be an antecedent of relationship quality. This finding is similar to that of Kumar, Scheer, and Steenkamp (1995), who reported that fairness is an indicator of relationship quality. Fairness represents a key component of equity (Oliver and Swan, 1989b). In addition, research suggests that equity is an antecedent of customer satisfaction (Oliver and Swan, 1989a). A buyer who believes he or she is being treated fairly is more likely to be satisfied and to permit a relationship to grow with a supplier.

**Future Research and Limitations**

The current research increases our knowledge about the development of buyer–salesperson relationships. At the same time, this study suggests several areas that call for further research. First, there is a need to replicate the extended model in other business-to-business sales settings, where a product, as opposed to a service, is the focus of the sales call. The intangible nature of the service setting may result in relationship quality having a greater influence on the consequences of expertise and anticipated future interaction than would be the case where a tangible product is being sold. Second, further replication of the current study’s extended model in a consumer setting with a tangible product, as opposed to a service, also would be beneficial.

An allied issue is the importance of equity in building relationships. Before the current study, the linkage between equity and relationship quality has not been widely examined in business settings regarding the quality of the buyer–salesperson relationship. However, additional information is needed about this relationship. Also, does the type of product (i.e., consumer vs. business, product vs. service) affect the relationship between these constructs?

**Conclusion**

The current research supports several of the linkages in the Crosby, Evans, and Cowles (1990) model of the antecedents and consequences of relationship quality. Six of eight hypotheses common to their original study and our replication yielded similar findings. However, two of their findings were not supported in this research. Our study was conducted with customers of firm that sold a service to businesses; whereas, the original study used a consumer sample of life insurance purchasers. The differences that were discovered are likely to be a function of the different sales environment being studied and, perhaps, indicate that business buyer–salesperson relationships may have some different antecedents and consequences from those found in a consumer sales setting. However, the model did have a number of linkages that were significant in both settings.

An extension of the original model also is provided. The extension examines the role of equity as an antecedent to relationship quality. Our findings indicate that equity is a significant predictor of relationship quality. The current study indicates that the Crosby, Evans, and Cowles (1990) model and the proposed extended model are appropriate for sales environments where services are being sold.

**References**


Boles, J. S., Barksdale, H. C., Jr., and Johnson J. T.: What National


