

## Relationship strength dimensionality

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### Abstract

Many service businesses today are focused upon creating and managing long-term sustainable consumer relationships. A successful relationship marketing (RM) strategy requires an understanding of the dimensions that comprise relationship strength. In particular, this study extends previous research by identifying salient relationship strength dimensions within a high-credence, non-profit service context. Furthermore, the results of a first-order and second-order factor analysis identified the structure and comparative importance of these dimensions.

The major finding of this research was the identification of three categories of relationship strength dimensions which reflect the magnitude of the relationship. It was concluded that within a high-credence, non-profit service context, consumers' perceived *Benevolence* dimensions as the most important category of relationship strength, followed by *Care* dimensions and then *Feedback* dimensions. The major implication of this study is that relationship strength dimensionality is not generic across service contexts and, furthermore, extends beyond the traditionally cited satisfaction, trust and commitment dimensions. Overall, the research findings contribute to current RM theory and provide useful practical contributions.

### Introduction

The purpose of this research was to investigate the dimensionality of relationship strength within a high-credence, non-profit service environment. Research into relationship strength is an important theme in the relationship marketing (RM) literature. Indeed, managers require an understanding of the dimensions of relationship strength in order to implement and sustain long-term customer relationships. Many studies have aimed to identify generically applicable relationship dimensions. However, the identification and salience of relationship dimensions perceived by the customer are context-specific (Barnes, 2001; Lehtinen, 1996). Additional to providing useful practical information, examining the dimensionality of relationship strength in the chosen service context generates theoretical contributions.

### Background

Contemporary RM has been of interest to academics and practitioners for well over a decade. The subjective, complex and dynamic nature of relationships has resulted in a fragmented understanding of RM with many areas of potential research remaining (Bejou, 1997; Greenberg and Li, 1998; Gummesson, 1997). Somewhat ambiguous and non-specific, RM remains an ill-defined phenomenon that has proved difficult to operationalise (Bagozzi, 1995; Fournier, Dobsha and Mick, 1998; Healy, Hastings, Brown and Gardiner, 2001). Primarily, RM is concerned with attracting, building and maintaining long-term collaborative and cooperative relationships with existing and

potential customers (Berry, 2002; Harker, 1999; Grönroos, 1990; Gummesson, 1987; Jackson, 1985; Jüttner and Wehrli, 1994; Roberts, Varki and Brodie, 2003). From previous research it is apparent that relationships are multi-faceted, context dependent (Holmlund and Törnroos, 1997) and best examined from the customer's perspective (Barnes, 2001).

In early-1990s literature the scope of RM was described as almost boundless (Barnes, 2001). However, over time it has become more widely accepted that RM was not as broadly applicable as first thought and, in reality, RM may be best suited to specific service environments (Egan, 2001; Greenberg and Li, 1998; Rao and Perry, 2002). Interestingly, much RM research has been undertaken in for-profit contexts and focused upon primarily economic relationships (Arnett, German and Hunt, 2003). The expansion of RM research into a variety of service contexts is necessary in order to progress the discipline. Of particular interest in this research are customer-to-business relationships within a high-credence, non-profit service setting.

*Relationship strength* is an integral component of RM, although it requires additional research (Bejou, Wray and Ingram, 1996; Crosby, Evans and Cowles, 1990; Czepiel, 1990; Naude and Buttle, 1999). Relationship strength describes the climate and depth of the relationship (Barnes, 1995; Bove and Johnson, 2001) and how well the relationship fulfils the goals, expectations and predictions the customer has of the relationship (Jarvelin and Lehtinen, 1996). High relationship strength reflects customer confidence in current and future performance as well as the reliability of the integrity of the service provider (Wong and Sohal, 2002).

In the literature, relationship strength is conceptualised as a higher order, multi-dimensional construct that addresses a magnitude of relationships (Bejou, Wray and Ingram, 1996; Bove and Johnson, 2001; Crosby, Evans and Cowles, 1990; Gummesson, 1987; Hennig-Thurau, Gwinner and Gremler, 2002; Kim, Han and Lee, 2001; Parsons, 2002). There exists no accepted definition of relationship strength rather, conversely, there is little semantic consistency or contextual delineation in the literature with much confusion as to the use of the terms relationship closeness, relationship quality and relationship strength (Bove and Johnson, 2001). For clarity, the recommended semantic guidelines developed by Bove and Johnson (2001) were adopted for this research. Hence, relationship strength was defined as a customer's global perception of the magnitude of the relationship that they have with an organisation in a consumer-to-business context (Bove and Johnson, 2001).

Relationship strength may be measured using relationship dimensions (Barnes, 1995). Most investigations into relationship strength have focused upon customer satisfaction, trust and commitment as the predicting dimensions (for example, Crosby, Evans and Cowles, 1990; Dorsch, Swanson and Kelley, 1998; Hennig-Thurau and Hansen, 2000; Hennig-Thurau, Gwinner and Gremler, 2002). This research adopted similar measurement principals, examining relationship strength as comprising of a number of relationship dimensions. In addition, this research is focused upon extending the dimensions of relationship strength beyond customer satisfaction, trust and commitment, as this remains unexplored in the literature (Bejou, Wray and Ingram, 1996).

There are many relationship dimensions identified in the literature. Key relational dimensions include: cooperation, customisation/personal attention, two-way

communication, interest, friendship, rapport, empathy, trust, understanding, kept promises, competence, similar values, sincerity, support, caring, honesty, commitment and benevolence (Barnes, 1995; Barnes, 2001; Crosby, Evans and Cowles, 1990; Dwyer, Schurr and Oh, 1987; Sirdeshmukh, Singh and Sabol, 2002; Ward, Frew and Caldwell, 1997). In particular, trust plays a pivotal role in customer relationships (Cowles, 1997; Moorman, Zaltman and Deshpande, 1992) with a distinction made between trust and trustworthiness (Sirdeshmukh, Singh and Sabol, 2002). Overall, bonding, empathy, reciprocity, trust, commitment, loyalty, understanding and shared values are dimensions of which there is a general consensus in the RM literature (Ward, Frew and Caldwell, 1997).

In brief, relationship strength is a higher-order, multi-dimensional construct which reflects the magnitude of a relationship. The theoretical gap of concern in this research is the identification and measurement of relationship strength dimensions as perceived by customers of high-credence, non-profit services.

### Methodology

The data for this study was collected from customers of a high-credence, non-profit service context, namely Australian higher education services. Of particular interest were customers of regional, 'new' Australian universities. 'New' universities are institutions that were granted university status post-1986 and which emphasise access, customer friendliness, regional factors and teaching quality (Marginson and Considine, 2000). Specifically, this research investigated the relationships that students formed with their lecturers/tutors during their first year of study.

A two-stage methodology was applied, with the Stage 1 exploratory study employing interview and focus group methods. Interviews were used in a preliminary capacity with six interviews conducted by the researcher. To complement the interviews, three focus groups comprising 20 participants were undertaken. Stage 2 was the administration of a quantitative questionnaire. Using a two-stage sampling process, the questionnaire was administered at three regional, 'new' universities. Due to privacy concerns of the participating universities, the questionnaire was administered in a lecture or tutorial component of a first year course. Screening questions at the beginning of the questionnaire ensured that only those students in the required sample frame completed the questionnaire. Business students sampled were Australian, full-time, undergraduate and first year students. Furthermore, only internally enrolled students – students who are on-campus and participate in face-to-face teaching – were sampled. A useable sample of 334 responses was collected, representing a response rate of 80.3%. For Stage 2, an exploratory factor analysis, first-order confirmatory factor analysis and second-order confirmatory factor analysis were conducted.

### Findings

*Stage 1: Exploratory study findings.* In the interview research respondents ranked 18 dimensions drawn from the literature in terms of their relevance to student-lecturer/tutor relationships. An additional three dimensions were identified in discussion. Next, these 21 dimensions were ratified in focus groups, with respondents asked to identify and

define the most potent dimensions of student-lecturer/tutor relationships. Analysis and interpretation of the exploratory study identified 18 dimensions of relationship strength relevant to the selected service context. These 18 dimensions were: honest comments (S1), beneficial advice (S2), truthful (S3), trust (S4), did the right thing by me (S5), good intentions (S6), rapport (S7), approachable (S8), relationship-willing (S9), cared (S10), reliable (S11), supportive (S12), spent time (S13), understanding (S14), interested in my thoughts (S15), competent (S16), communicated clearly (S17) and provided useful information (S18).

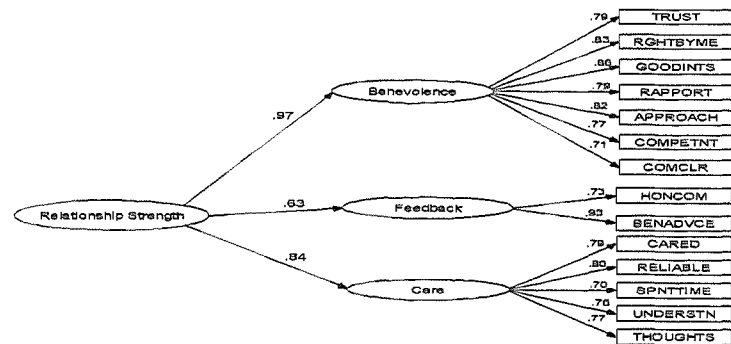
*Stage 2: Main study findings.* Firstly, an exploratory factor analysis (EFA) was conducted on the 18 dimensions for relationship strength. The initial solution generated by SPSS indicated that there were three factors, however, three dimensions cross-loaded – supportive (S12) (1 = 0.520, 3 = -0.398), provided useful information (S18) (1 = 0.408, 3 = -0.474) and truthful (S3) (2 = 0.335, 3 = -0.374). To aid interpretation and achieve discriminant validity these three dimensions were excluded and the EFA re-run (Tabachnick and Fidell 1996). The rotated factor solution indicated that the remaining 15 dimensions formed three factors, which explained 69.30% of the variance. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (0.94) and Bartlett's Test of Sphericity (0.00) indicated that the factor solution was acceptable. Loadings of the dimensions ranged from 0.56 to 0.94. These three first-order factors were then labelled *Benevolence* ( $\alpha = 0.92$ ), *Feedback* ( $\alpha = 0.80$ ) and *Care* ( $\alpha = 0.88$ ). *Benevolence* comprised seven dimensions and *Feedback* comprised two dimensions with the remaining six dimensions loading upon *Care*. None of these scales could be improved through the removal of variables as reported by SPSS and all the Cronbach's alpha values were above the preferred 0.7 threshold (Hair, Anderson, Tatham and Black, 1995).

Next, confirmatory factor analysis (CFA) was undertaken for each factor using AMOS 4.0. For the CFA evaluation, the critical ratios, lambda values (or standardised regression weights) and standardised residuals were assessed. Firstly, critical ratios were significant if greater than the conventional threshold of  $\pm 1.96$  (Hair *et al.*, 1995). Secondly, lambda values were required to be at least 0.7 to be retained in the CFA measurement model (Hair *et al.*, 1995; Hulland, Chow and Lam, 1996), which provided the researcher with greater confidence that the individual indicator variables were consistent in their measurements (Hair *et al.*, 1995). Theoretical aspects were also considered when assessing the lambda values. Thirdly, standardised residuals greater than  $\pm 2.58$  indicated possible specification error, and were investigated (Jöreskog and Sörbom, 1996).

Having determined the CFA evaluation criterion, *Benevolence*, *Feedback* and *Care* latent variables were assessed, respectively. Seven dimensions loaded on the *Benevolence* latent variable with all reporting critical ratios greater than  $\pm 1.96$ , lambda values greater than 0.7 and all standardised residuals were less than  $\pm 2.58$ , indicating good fit. The *Feedback* latent variable comprised of two indicator variables – honest comments (S1) and beneficial advice (S2) – therefore was unsuitable for CFA using AMOS 4.0 at this point. However, the subsequent second-order factor analysis would assess *Feedback* through a confirmatory process. The initial solution for the *Care* latent variable reported that six dimensions loaded upon the factor. As the lambda value for relationship-willing (S9) ( $\lambda = 0.683$ ) was below the required 0.7 threshold and there was no theoretical support for the inclusion of the dimension, it was excluded from further analysis and the CFA for *Care* re-run. The resulting *Care* latent variable comprised five dimensions, all of which reported acceptable critical ratios, lambda values and standardised residuals.

The three first-order factors of *Benevolence*, *Feedback* and *Care* measured a second-order factor, *Relationship Strength*. This being the case, a second-order confirmatory factor analysis was conducted, which is presented in Figure 1.

Figure 1: Second-order Relationship Strength CFA



As shown in Figure 1, of the three first-order factors of *Relationship Strength* identified in the study, *Benevolence* ( $\beta = 0.97$ ,  $\alpha = 0.92$ ) loaded the highest upon the second-order factor, followed by *Care* ( $\beta = 0.84$ ,  $\alpha = 0.80$ ) and then *Feedback* ( $\beta = 0.63$ ,  $\alpha = 0.87$ ). The reported Cronbach's alpha values, critical ratios, standardized residuals and standardized loadings (Beta values) were greater than the required thresholds. Furthermore, reliability and validity tests were conducted. It was concluded that the second-order *Relationship Strength* factor possessed predictor reliability and construct reliability as well as discriminant validity and convergent validity.

### Conclusions and Implications

Theoretically, the findings of this research contributed to RM by addressing the identified gap in the relationship strength literature. Primarily, this research augmented the dimensions of relationship strength beyond customer satisfaction, trust and commitment dimensions. The relationship dimensions prevalent in the selected high-credence, non-profit service context formed three categories which are, in order of importance, *Benevolence*, *Care* and *Feedback*.

Practically, these findings are useful for the marketers of high-credence, non-profit services, such as higher education, in that it provides an inventory of salient relationship strength dimensions that will assist in the effective operationalisation of a sustainable RM strategy. Furthermore, these findings may assist in the training of service personnel to understand and enhance the magnitude and climate of their customer relationships. Overall, the major implication of this study is that the dimensions of relationship strength identified by customers and the relative importance of these dimensions may vary by context. Conceivably, relationship strength dimensionality is diverse rather than generic across different service contexts.

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