Trust Affecting on Negotiation Styles

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Abstract
International buyers and sellers have to build a strong relationship based on numerous factors including trust and reliability. Many researchers had linked between negotiation strategy and trust. In general, trust varies by culture but it is not clear whether or not trust varies by culture in particular situations, such as negotiations. A quantitative, exploratory and explanatory study was conducted to assess the relationships between trust and negotiation styles. AMOS software was used to test both the measurement and the structural models that related to the research hypotheses. The result shown trust is a significant factor affecting negotiation styles, and the group of low trust prefers different negotiation styles from the group of high trust. Future study could use a different design to examine other factors posited by the theories, such as ethics, gender, work experience and education, to explore other antecedents on negotiation, and should be conducted in other participants or different regions.

Key Words: Trust, Negotiation styles, SEM

1. Introduction
International buyers and sellers have to build a strong relationship based on numerous factors including trust and reliability (Tu, 2007). As the number of face-to-face negotiations dramatically increases, business negotiation strategies, styles, and agreements are becoming more important (Kumar, Markeset, & Kumar, 2004). The negotiation process between the buyer and the seller is a very important matter (Neslin & Greenhalgh, 1983), and achieving success in negotiation is one of the most challenging communicative tasks in business (Gilsdorf, 1997). Differences in negotiating styles originate from the fact that every society places different degrees of importance on “relationship development, negotiating strategies, decision making methods, spatial and temporal orientations, contracting practices, and illicit behaviors such as bribery” (Acuff, 1997, p. 19). Successful negotiation not only requires acquiring technical communicative abilities, but also an understanding of the context of the negotiation by both parties (Korobkin, 2000). In the broadest sense, negotiation is a process of communicating back and forth to discuss the issues to reach an agreement that is satisfactory to all parties involved (Foroughi, 1998; Gulbro & Herbig, 1994). Upon completing the negotiations, the parties will enter a formal agreement. An agreement is the exchange of conditional promises, in which both parties agree to act in accordance with their promises (Martin, 1997).

People from different cultures vary in their willingness to trust (Ferrin & Gillespie, 2010; Johnson & Cullen, 2002). Trust has been recognized as a pre-requisite for successful cooperative bargaining behaviors (Pruitt, 1981). Many researchers had linked between negotiation strategy and trust (Butler, 1995, 1999; Deutsch, 1973; Kimmel, Pruitt, Magenu, Konargoldband, & Carnevale, 1980; Walton & McKersie, 1965; Zand, 1972). In general, trust varies by culture but it is not clear whether or not trust varies by culture in particular situations, such as negotiations (Gunia, Brett, Nandkeolyar, & Kamdar, 2011). Therefore, the focus of this study is on trust and its effects on the negotiation styles.

2. Review of the Literature
In general, trust is “a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). Dellech (2012) indicated that trust is an important theoretical stand, but the concepts of trust are still ambiguous although it is grown important and recognized within inter-organizational relationships.
Negotiation is a kind of social interaction for reaching an agreement for two or more parties, with different objectives or interests that they think are important (Manning & Robertson, 2003; Fraser & Zarkada-Fraser, 2002). Cross-cultural negotiations are more complicated due to cultural factors, environments, languages, communication styles, ideologies, and customs (Hoffmann, 2001; Mintu-Wimsatt & Gassenheimer, 2000). When conducting international business strategic alliances, business negotiation and multilateral negotiations have become essential (Graham, Mintu, & Rodgers, 1994). Gulbro and Herbig (1999) indicated that in order to achieve successful agreements, negotiations are important in order to eliminate competing points of view between the representatives of both parties.

Carnevale and Pruitt (1992) identified three main traditions associated with negotiation. The first tradition is books of advice for negotiators that have existed for centuries. The second tradition involves the construction of mathematical models of rational negotiation and mediation by economists and game theorists, while the third tradition focuses on the behavioral aspects of negotiators. Carole and Payne (1991) divide negotiation into the following four general approaches: 1) the normative or prescriptive approach, based on logical models of bargaining; 2) the individual differences approach, focused on elements of individuality; 3) the structural approach, grounded in sociological factors; and 4) the cognitive or information processing approach, highlighting the role of judgment biases in negotiations.

Zartman (1976) indicated that there are seven schools of thought within the study of negotiation that help explain outcomes with regard to different variables. The first relies on historical description that highlights details at each stage of negotiation to determine the next step, as well as explain the history and outcome of specific negotiations. The second is contextual that stresses the historical or cultural circumstances that may influence and explain a specific party’s position. Contextual studies distinguish the process and outcome of negotiations according to the history of the negotiation and larger historical context into which it fits. The third is structural focusing on the relative strengths and weaknesses of each party that help explain the negotiation’s outcome. The structural approach also examines the patterns of relationships between parties, which can enhance the success of a given negotiation. The fourth is strategic that strives to describe each party’s values and desires. It focuses on strategic decisions in the context of the values at stake and the general pattern of settling disputes for both parties. The fifth utilizes personality types to explain the outcome of the negotiations. This approach also describes each party’s dissimilar negotiation styles and how this may affect the outcome. The sixth focuses on behavioral skills. This particular method studies the outcome in the context of the behavioral skills of the participants and how each responds to the other. By appealing to each side’s needs and emotions, both parties attempt to secure the best resolution for their side.
The seventh approach is process variables that examine negotiations as a learning endeavor that is traversed through the challenges faced and responses given by the negotiating parties. This process emphasizes how the outcome of each step determines the next step in the process.

Casse and Deol (1985) developed a conceptual framework foundational for negotiation styles, and based on the Jung’s 1967 four psychological types (sensing versus intuition, and thinking versus feeling). These negotiation styles were defined by Osman-Gani and Tan (2002) as follows:

A factual style identifies facts in an unemotional manner, pays attention to details and all statements made during a negotiation, and places much importance on proof and facts as related to experience. An intuitive person is warm and animated when making statements, flexible and creative during negotiations, fluid and able to adapt to changing subjects and situations, and imaginative in projecting into the future. A normal person considers and weights facts according to a set of personal values; this person uses all the tools at his or her disposal, such as emotions, status, authority, and rewards, to come up with the best bargain. The analytical negotiator is strongly logical, tries to find cause-and-effect in all issues, and likes to weigh pros and cons thoroughly. (p. 825) The model examined the effects of trust on negotiation styles. A schematic model was developed by the researcher and shown in Figure 1.

Research hypotheses were proposed about factors affecting negotiations among negotiators. These were based on the key gaps in the literature, the recommendations addressed in this study, and the theoretical framework that was used to guide this study. The research aims to provide answers to the following hypotheses:

Hypothesis 1: Trust is a significant factor affecting negotiation styles.
Hypothesis 2: The group of low trust prefers different negotiation styles from the group of high trust.

3. Methodology

A quantitative, exploratory (comparative) and explanatory (correlational) study was conducted to assess the relationships between trust and negotiation styles.

3.1 Instrumentation

A two-part questionnaire for the study was developed in order to measure the research variables. In the questionnaire, three of the items were designed to examine trust according to the theory of Klein in 2007 by means of a five-point Likert scale, and ranged from strongly agree (5) to strongly disagree (1). Four styles of negotiation as dependent variables, three of the items designed for each negotiation style, which was developed and defined by Casse and Deol in 1985 by means of a five-point Likert scale. There were five possible responses for each statement: 5 = Always (100% of the time); 4 = Often (75%); 3 = Occasionally (50%); 2 = Seldom (25%); and 1 = Never (0%). These socio-demographic questions and the coding schemes used included: Gender: 1 = male; 2 = female. Age: 1 = under 35; 2 = 35–45; 3 = 46–55; and 4 = over 55. Education: 1 = high school diploma or equivalent; 2 = bachelor degree; and 3 = graduate degree.

3.2 Population

The survey was distributed to participants from public companies listed on the Taiwan Stock Exchange Corporation (TSEC). Data were collected using an online survey, with a hyperlink to the survey website that was provided on each e-mailed invitation in traditional Chinese characters, and participants were directed to their preferred versions from the e-mail.

3.3 Methods of date Analysis

Hair, Black, Babin, and Anderson (2010) indicated that structural equation modeling (SEM) has become a popular multivariate approach because it provides a means of assessing theories that is conceptually appealing. AMOS software (version 18.0), which includes an SEM package with maximum likelihood estimation, was used to test both the measurement and the structural models that related to the research hypotheses listed. The present research also made use of a number of criteria to determine the inclusion of items and the goodness of fit of the model. Hair et al. (2010) suggested a six-stage procedure for employing SEM, which the research also followed here.
4. Results

There were 248 questionnaires collected, but 15 questionnaires were incomplete or invalid. All questionnaires were coded for statistical analysis using the SPSS 14.0. From the 233 respondents, in total, 142 (60.9%) respondents were male and 91 (39.1%) were female. 32 (13.7%) of the respondents were under 35 years old, 65 (27.9%) were between 35 and 45, 115 (49.6%) were between 46 and 55 and 21 (9%) were older than 55. In the study, 23 (9.9%) respondents had a high school diploma or equivalent, 124 (53.2%) held a bachelor's degree and 86 (36.9%) had a graduate degree.

The univariate normality of the skewness and kurtosis values and the multivariate normality were used to assess the normality. The most commonly used critical values of univariate normality are ±3 and ±10 (Kline, 1998). In the study, all the values of skewness were between .870 and −.278, and the values of peakedness lay between .187 and −.784. The observed variables all had univariate normal distributions. The value of Mardia statistic is for multinormality measurement, and it is constructed a test based on skewness and kurtosis. Bollen (1989) indicated that if the value of Mardia is smaller than p (p+2), p indicating the amount of observed variables, all dimensions are multinormality. In the study, the value of Mardia is 28.787, smaller than 15 (15+2), indicating multivariate normality distribution.

The validity of the construct was measured using the convergent and discriminant validity. The convergent validity was used to determine whether scale items converged on a single construct during measurement (Steenkamp & Van Trijp 1991). This was determined from the evaluation of the factor loadings (which must be at least 0.5), composite reliability (at least 0.6) and average extracted variance (at least 0.5) in the study (Hair et al. 2010; Fornell & Larcker 1981). In the structural models, all the factor loading estimates were higher than .69, the composite reliability (CR) values ranged from .83 to .94, and the extracted average values of variance lay between .62 and .84. This evidence supports the convergent validity of the measurement model, as shown in Tables 1.

The discriminant validity is the extent to which a construct is truly distinct and unique, and this measure captures phenomena that other measures do not (Hair et al. 2010). Bagozzi and Phillips (1982) stated that metrics support discriminant validity if the upper and lower limits of the computed confidence interval did not include the number 1. In the present research, a model was constructed for each of the 10 paired correlations of the latent variables. Then, the correlation was set between the two constructs to 1, and a 95 percent confidence interval was applied in order to apply a bootstrap. As the results, all values of paired correlations of the latent variables were from -.487 to .500, the number 1 is not included with the upper and lower limits of the confidence interval, which indicates discriminant validity among the theoretical constructs.

The results of the SEM model were obtained using AMOS 18.0, and the model fits are reported in Table 2. The overall model fit $\chi^2$ was 113.33 with 85 degrees of freedom. The p-value associated with this result was .02. The p-value was significant using a type I error rate of .05; thus, the $\chi^2$ goodness-of-fit statistic does not indicate that the observed covariance matrix matches the estimated covariance matrix within the sampling variance.

The value of RMSEA, an absolute fit index, was .04. This value is smaller than the guideline value of .10, therefore, RMSEA supports the model fit. The value of GFI (.94) was higher than the guideline value. RMR had a value .03 was smaller than .05. The SRMR (.07) was higher than .05. The normed $\chi^2$ was 1.33. This measure is the chi-square value divided by the number of degrees of freedom. A number smaller than 3.0 is considered to be very good. Thus, the normed $\chi^2$ suggests an acceptable fit for the structural model.

In the SEM model, the CFI had a value of .99, which exceeds the CFI guidelines for a model of this complexity and sample size. The other incremental fit indices (NFI = .96) also exceeded the suggested cutoff values. All the incremental fit indices presented an acceptable fit. The parsimony index of AGFI had a value of .92 and the PNFI was .77. Both indices were considered to represent a good model fit, given the acceptable critical value. The overall structural fit results of these analyses showed that the model provides a reasonable fit.

For the Hypothesis 1, The value of the standardized parameter estimates was .373. The standard error was .046, and the t-value was significant (p = 2.515*). For the hypothesis 2, a total score mean of a measurement between the highest and lowest groups should be statistically significant. However, the measurement or achievement test normally utilizes the first or the last 27% percentile as a way of grouping. Kelly (1939) stated that when the test score is normally distributed, using 27% as a cut-off can have greater reliability among items, and lower or greater than the cut-off is used, the result of the item reliability is likely to be weakened.
Hair et al. (2010) indicated that multiple group analysis provides a comprehensive framework for testing the differences between two or more samples of participants. The approach of measurement equivalence was employed, and multiple CFAs extended to separate samples in order to determine equivalence. For the group of lower trust, the estimated values of analytical, normative, factual, and intuitive styles were .399, -.314, .258 and -.836; and t-values are 5.298***, –3.865***, 4.543*** and –11.279***, as shown in Table 4.

5. Conclusion

There were 233 useful questionnaires in the study. Respondents from male, age between 46 and 55, and holding a bachelor's degree are most. From the data, the observed variables all had univariate and multivariate normal distributions. In the structural models, all the factor loading estimates were higher than .69, the composite reliability (CR) values ranged from .83 to .94, and the extracted average values of variance lay between .62 and .84. This evidence supports the convergent validity of the measurement model. As the results, all values of paired correlations of the latent variables not included the number 1 with the upper and lower limits of the confidence interval, which indicates discriminant validity among the theoretical constructs.

The result of the SEM model shown that the overall model fit $\chi^2$ was 113.33 with 85 degrees of freedom, and the p-value associated with this result was .02. The p-value was significant using a type I error rate of .05. According to previous research, a number of indices are available to evaluate model fits (Bentler, 1992; Fornell and Larcker, 1981; Jöreskog and Sörbom, 1992), but no single index or standard is generally agreed; hence, multiple criteria should be used to evaluate the overall fit of the theoretical model (Hair et al., 2010; Bagozzi and Yi, 1988). The value of RMSEA supports the model fit. The value of GFI (.94) was higher than the guideline value. RMR had a value .03 was smaller than .05. The SRMR (.07) was higher than .05. The normed $\chi^2$ was 1.33 which smaller than 3.0 is considered to be very good. Thus, the normed $\chi^2$ suggests an acceptable fit for the structural model. All the incremental fit indices of CFI and NFI presented an acceptable fit. Both indices of AGFI and PNFI were considered to represent a good model fit, given the acceptable critical value. The overall structural fit results of these analyses showed that the model provides a reasonable fit.

The result supported the hypothesis 1 that trust is a significant factor affecting negotiation styles, and the result is similar to Pruitt’s reported in 1981 that trust has been recognized as a pre-requisite for successful cooperative bargaining behaviors. For the hypothesis 2, group of low trust prefers analytical and factual negotiation styles, and group of high trust prefers normative and intuitive negotiation styles. Therefore, the hypothesis 2 is also supported.

The study measured single factor affecting on negotiation styles, and adopts only a quantitative research method. Although the SEM provides a good fit to the hypothesized model, future research could use a different design to examine other factors posited by the theories, such as ethics, gender, work experience and education, to explore other antecedents on negotiation, and should be conducted in other participants or different regions.

References


Figure 1. Schematic Model Depicting Relationships between Trust and Negotiation Styles

Table 1: Standardized Parameter Estimates, Composite Reliability and Average Variance Extracted Values for the Structural Model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicator</th>
<th>Standardized Parameter Estimates</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Trust 1</td>
<td>.84</td>
<td>.88</td>
<td>.71</td>
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<td></td>
<td>Trust 2</td>
<td>.87</td>
<td></td>
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<td></td>
<td>Trust 3</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN</td>
<td>AN1</td>
<td>.95</td>
<td>.94</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>AN2</td>
<td>.91</td>
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<td>AN3</td>
<td>.89</td>
<td></td>
<td></td>
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<tr>
<td>NN</td>
<td>NN1</td>
<td>.90</td>
<td>.94</td>
<td>.84</td>
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<tr>
<td></td>
<td>NN2</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>NN3</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FN</td>
<td>FN1</td>
<td>.69</td>
<td>.83</td>
<td>.62</td>
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<tr>
<td></td>
<td>FN2</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FN3</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>IN1</td>
<td>.89</td>
<td>.92</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>IN2</td>
<td>.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN3</td>
<td>.89</td>
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Table 2: Comparisons of Goodness-of-Fit Indices of SEM Models

<table>
<thead>
<tr>
<th>GOT Indices</th>
<th>Criterion Guidelines</th>
<th>SEM Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square ($\chi^2$)</td>
<td></td>
<td>113.33</td>
</tr>
<tr>
<td>Chi-square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of freedom</td>
<td></td>
<td>85</td>
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<tr>
<td>Probability</td>
<td>$p &gt; .05$ (Jöreskog &amp; Sörbom, 1992)</td>
<td>.02</td>
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<tr>
<td>Absolute fit measures</td>
<td></td>
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<tr>
<td>GFI</td>
<td>$&gt;.80$ (MacCallum &amp; Hong, 1997)</td>
<td>.94</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$&lt;.10$ (Steiger, 1990)</td>
<td>.04</td>
</tr>
<tr>
<td>RMR</td>
<td>$&lt;.05$ (Wu, 2009)</td>
<td>.03</td>
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<tr>
<td>SRMR</td>
<td>$&lt;.05$ (Jöreskog &amp; Sörbom, 1992)</td>
<td>.07</td>
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<tr>
<td>Normed chi-square</td>
<td>$&lt;3$ (Hair et al., 2010)</td>
<td>1.333</td>
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<tr>
<td>Incremental fit measures</td>
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<tr>
<td>NFI</td>
<td>$&gt;.90$ (Bentler, 1992)</td>
<td>.96</td>
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<tr>
<td>CFI</td>
<td>$&gt;.90$ (Gerbing &amp; Anderson, 1992)</td>
<td>.99</td>
</tr>
<tr>
<td>Parsimony fit measurement</td>
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<tr>
<td>AGFI</td>
<td>$&gt;.80$ (MacCallum &amp; Hong, 1997)</td>
<td>.92</td>
</tr>
<tr>
<td>PNFI</td>
<td>$&gt;.50$ (Wu, 2009)</td>
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Table 3: Standardized Parameter Estimates for the Structural Model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimates</th>
<th>S. E.</th>
<th>t-value</th>
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<tr>
<td>H1</td>
<td>.373</td>
<td>.046</td>
<td>2.515*</td>
</tr>
</tbody>
</table>

* p< .05. ** p< .01. *** p<.001.

Table 4: Estimates of US Styles of Negotiation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimate</th>
<th>S.E.</th>
<th>t-value</th>
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<tr>
<td>Analytical style</td>
<td>.399</td>
<td>.075</td>
<td>5.298***</td>
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<tr>
<td>Normative style</td>
<td>-.314</td>
<td>.081</td>
<td>-3.865***</td>
</tr>
<tr>
<td>Factual style</td>
<td>.258</td>
<td>.057</td>
<td>4.543***</td>
</tr>
<tr>
<td>Intuitive style</td>
<td>-.836</td>
<td>.074</td>
<td>-11.279***</td>
</tr>
</tbody>
</table>

*** The mean difference is significant at the .001 level.