TRANSFORMATIONAL LEADERSHIP IN THE CONSUMER SERVICE WORKGROUP: COMPETING MODELS OF JOB SATISFACTION, CHANGE COMMITMENT, AND COOPERATIVE CONFLICT RESOLUTION[1]

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Summary.—This paper discusses the effects of transformational leadership on cooperative conflict resolution (management) by evaluating several alternative models related to the mediating role of job satisfaction and change commitment. Samples of data from customer service personnel in Taiwan were analyzed. Based on the bootstrap sample technique, an empirical study was carried out to yield the best fitting model. The procedure of hierarchical nested model analysis was used, incorporating the methods of bootstrapping mediation, PRODCLIN2, and structural equation modeling (SEM) comparison. The analysis suggests that leadership that promotes integration (change commitment) and provides inspiration and motivation (job satisfaction), in the proper order, creates the means for cooperative conflict resolution.

Today's complex service environment requires upgraded skills to deal with the complexity and customization of business transactions: for example, working together to increase service quality, respond quickly, and provide customers with updated information. It has been shown that cooperative conflict resolution—finding solutions that ensure workgroup cohesiveness—enables these service groups to better respond to challenges (Zhang, Cao, & Tjosvold, 2011; Yang, 2012c). Cooperative conflict resolution for group members entails concentration on sharing useful job experience related to phone-line services, financial advice, and front-line sales, with the goal of satisfying the customer's need for service quality (Hempel, Zhang, & Tjosvold, 2009). Transformational leadership can enhance cooperative conflict resolution (Dionne, Yammarino, Atwater, & Spangler, 2004; Zhang, *et al.*, 2011; Yang, 2012b, 2012c) by providing social support, decreasing interpersonal tensions, and encouraging employees to consider each other's opinions. The aim of the leadership is to create a suitable work environment and implement change initiatives (Yukl, 2012). Leadership influences individuals to transcend their own self-interests for the attainment of mutual goals and collective benefits, including the positive resolution of problems (Somech, Desivilya, & Lidogoster, 2009).

The leader, on the other hand, tends to pay more attention to the long-term goals, e.g., sales trends, project performance, and service competence. Higher change commitment and job satisfaction can be expected because the leader is likely to cultivate internal task attitudes and job motivation to reach set goals. For details of leadership predicting change commitment in these three studies, see the results of Podsakoff, MacKenzie, Moorman, and Fetter (1990), Walumbwa, Orwa, Wang, and Lawler (2005), and Herold, Fedor, Caldwell, and Liu (2008)), who reported model $R^2 = .17$, .14, and .01, $ps < .01$, respectively. For the results of leadership predicting job satisfaction in these three studies, see the studies of Podsakoff, *et al.* (1990), Nemanich and Keller (2007), and Braun, Peus, Weisweiler, and Frey (2013), who reported model $R^2 = .41$, .10, and .25, $ps < .01$, respectively. Job satisfaction promotes resolution by motivating employees to work together, support each other, and rethink the importance of achieving the group's goals (Hughes & Avey, 2009). Change commitment enhances mutual bonds between members through mutual communication of goals in support of resolution (Herscovitch & Meyer, 2002; Herold, *et al.*, 2008).

The relationship between leadership and cooperative conflict resolution is mediated by job satisfaction and change commitment. Specifically, the betas for the study of leadership, job satisfaction, and change commitment have been found to be statistically significant mediators (Yang, 2012c, .20–.89 for job satisfaction; .09–.39 for change commitment). To further understand the mediators between leadership and conflict resolution, six alternative models are tested in this study (Fig. 1). The six competing models assess proposed hierarchical sequences. The direct effect model (Model 1) is a baseline for comparison. Then, simple/sole mediators are introduced: job satisfaction in Model 2 and change commitment in Model 3, to help explain the single mediating role in a causal process between the leadership and cooperative conflict resolution (Baron & Kenny, 1986). Then, to assess multi-mediator models, a single-step multiple mediator (Model 4) and proximal-distal mediators (Model 5 and Model 6) (Preacher & Hayes, 2008; Hayes, 2012) are introduced. Model 4 includes two mediators (job satisfaction and change commitment), which do not affect each other. Model 5 and Model 6 are long-distance mediation paths, e.g., leadership→ change commitment→ job satisfaction→ cooperative conflict resolution in Model 5, as well as leadership→ job satisfaction→ change commitment→ cooperative conflict resolution in Model 6. All these models are discussed in detail later.[2]

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[2]Models 1 to 4 have been tested once already in a previous study (Yang, 2012c). This study adds the path coefficients from that study and cites them in the caption.
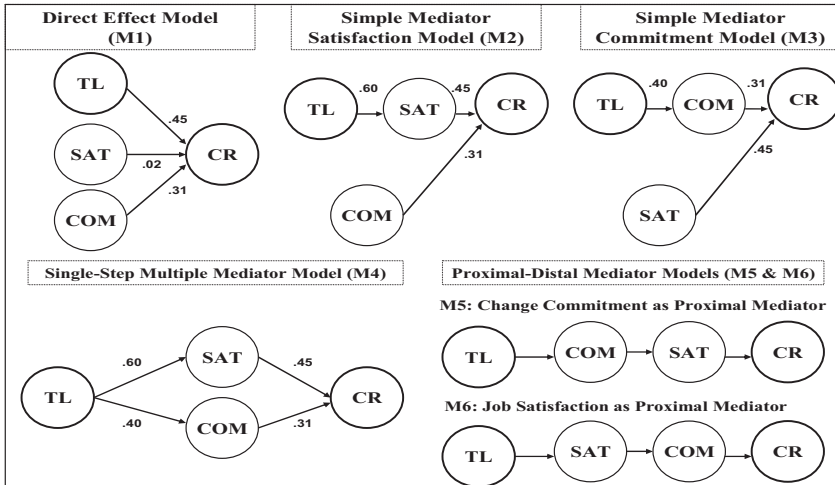
FIG. 1. Six models describing possible relations between transformational leadership (TL), job satisfaction (SAT), change commitment (COM), and cooperative conflict resolution (CR).

This study seeks to fill the gaps in the service literature, first of all by enriching the list of antecedents (e.g., leadership, satisfaction, and commitment) of conflict resolution. Secondly, the concepts of job satisfaction and change commitment are examined to illustrate how the two mediators exert influence on conflict resolution, particularly by examining the antecedents and subsequence of mediators simultaneously. Thirdly, whether the linkage relationships may be reinforced by the mediators through a simple mediator, single-step multiple mediator, and a distal effect were examined. Finally, the present study offers empirical information for theory development. A hierarchical nested model (Ha, Janda, & Muthaly, 2010) combined with bootstrapping methods (Preacher & Hayes, 2008; Hayes, 2012) and PRODCLIN2 (MacKinnon, 2011) was used to identify statistically significant mediators. This is an extension of the studies of Dionne, *et al.* (2004), Yang (2012a, 2012b), and Zhang, *et al.* (2011), which examined how leadership influences conflict resolution.

Service Environment and Constructs

The service environment has moved away from a sales orientation toward increasing the quality of customer service through minimizing differences between personnel and customers. Indeed, customer-contact employees are usually deployed as a team (Yee, Lee, Yeung, & Cheng, 2013) because of their particular functions such as setting service schedules, dealing with customers, supporting fellow team members, and achieving

performance targets. Employee teams at various divisions can be viewed as a workgroup comprised of individuals working together for a common purpose, namely service delivery and product promotion to internal members and external customers (Wallace, Chernatony, & Isabel, 2013). Leaders must involve the diverse perspectives, capabilities, and backgrounds of the members of the workgroup to achieve sales service quality (Podsakoff, *et al.*, 1990; Podsakoff, MacKenzie, & Bommer, 1996; Utley, Anderson, & Atwell, 2011). For example, by means of job satisfaction and change commitment, as already discussed above, leadership could foster interdependence within work groups.

Competing Models for Leadership and Cooperative Conflict Resolution

Model 1: direct effect model.—Consistent with earlier studies, Model 1 includes the three direct effects without any mediator involvement (Fig. 1): leadership can assist with cooperative conflict resolution by facilitating cooperative communication and inspiring confidence for the attainment of common goals (Bass, Avolio, Jung, & Berson, 2003), or change work processes to resolve difficulties (Hempel, *et al.*, 2009; Somech, *et al.*, 2009). Job satisfaction helps group members develop interpersonal relationships (Somech, *et al.*, 2009). Change commitment can be an important job motivation for work group members to develop cooperation of conflict resolution (Herold, *et al.*, 2008; Yang, 2013).

Model 2: a simple mediator satisfaction model.—Model 2 was developed to include direct effects, with job satisfaction as the mediator (Fig. 1). Model 2 highlights the importance of job satisfaction as a mediator which is influenced by the leader's ability to promote problem-solving skills. Job satisfaction makes it easier for workgroup members to accept their leaders' guidance toward task accomplishment, and this is reflected in better resolution.

Model 3: a simple mediator commitment model.—Model 3 contains the direct effects as well as the mediation of change commitment, and emphasizes the mediating role of change commitment and how this can encourage workgroup members to share their experience and information sources to accomplish mutual goals and benefits. When the leader combines personal concern with job inspiration, workgroup members can be made to sense that their individual emotions and psychological needs are understood. Members' affective involvement can reinforce pleasure in change commitment. In transitions, the leader can encourage the workgroup members to consider others' job needs. The development of commitment depends on transformative leadership (TL) and is aimed at transformation for change and suitable adaptation (Herold, *et al.*, 2008), ultimately improving cooperative problem resolution.

Model 4: a single-step multiple mediator model.—Job satisfaction and change commitment do not affect each other in Model 4. This multimediator model assumes that the influence of transformation leadership

on cooperative conflict resolution is through only one of these two media-tors. In addition, the model includes the total indirect effect of these two mediators as well as the specific indirect effects (and unique influences) through each single mediator (Preacher & Hayes, 2008; Hayes, 2012) in the leadership model. The main intent of this model is how the two me-diators, which are presented as a single-step analysis in parallel, enhance leadership's influence on conflict resolution.

Models 5 and 6: proximal-distal mediator models.—In the two models, one mediator affects the other in a serial rather than a parallel relation (Preacher & Hayes, 2008; Hayes, 2012). Leadership support for change commitment and job satisfaction has a positive effect because of the emo-tional attachments (affective change commitment), value of long-term re-lationships (continuance change commitment), and the sense of obliga-tion or duty (normative change commitment) for the common benefit of the organization (Herscovitch & Meyer, 2002; Soumyaja, Kamalanabhan, & Bhattacharyya, 2011). Some studies examined the influence of leader-ship on change commitment and the influence of job satisfaction on coop-erative conflict resolution; see Yang's (2011b) quantitative measure ($\beta = .48$, $R^2 = .23$, $p < .01$). It has also been reported in some studies that leader-ship influence leads to change commitment through the mediator of job satisfaction; see Yang's (2011a) quantitative information ($\beta = .55$, $R^2 = .30$, $p < .01$). Since the cited leadership studies reported differences in empiri-cal results for the path directions (e.g., job satisfaction and change commit-ment) (Yang, 2011a, 2011b), evidence suggests multi-mediators (Preach-er & Hayes, 2008; Hayes, 2012), in a properly ordered serial relationship. Two specific hypotheses follow:

> *Hypothesis 1*. Model 5 presents the first proximal-distal mediator paths: e.g., leadership→ change commitment → job satisfac-tion→ cooperative conflict resolution; where change commit-ment and job satisfaction are defined as proximal and distal mediators, respectively.

> *Hypothesis 2*. Model 6 presents the second proximal-distal medi-ator paths: e.g., leadership→ job satisfaction → change com-mitment → resolution; where job satisfaction and change commitment are defined as proximal and distal mediators, re-spectively.

METHOD

Sample

Four large life insurance companies in Taiwan were selected from which to collect data for this study. Participants understood that the ques-

tionnaire was designed to gather information about the present study. Participation in this study was voluntary. The participants understood that any information given would be kept confidential. These companies were selected because they strive to promote customer service quality by means of transformative leadership. A total of 460 questionnaires (115 per company) were sent out, between the spring and summer of 2011, to the personnel at their customer service centers. Response rate was 79.8% (367 responses, 341 valid). The valid responses were obtained from 176 women and 163 men (M age = 32.4 yr., SD = 5.2). The mean size of the four work-groups (e.g., phone service, customer representatives, financial specialists, and first-line salespeople) surveyed was 87, 85, 71, and 98, respectively. Their years in service were: 5 yr. or less (18.5%), 6 to 10 yr. (45.5%), 11 to 15 yr. (34.8%), 16 to 20 yr. (16.4%), 20 yr. or more (9.0%). Their education was: senior high school (7.0%), associate degree (32.6%), bachelor's degree (58.8%), graduate school (1.7%). A chi-squared homogeneity test (Armstrong & Overton, 1977) revealed no statistically significant differences for participants' sex (χ^2 = 0.16, p = .74), education (χ^2 = 4.96, p = .17), years of service (χ^2 = 1.97, p = .74), or role (phone services, customer representatives, financial specialists, and first-line salespeople) (χ^2 = 0.76, p = .41). Thus, the data were combined for further analysis.

Procedure

The participants understood that the questionnaire had been designed to gather information about the present study and that any information given would remain confidential. Participants were asked to rate their leaders and their own level of change commitment and job satisfaction, along with cooperative conflict resolution, which could raise the issue of common source bias. Thus, Podsakoff and Organ's (1986) approach was used to minimize respondents' response set and consistency motive. For example, the survey was anonymous, and the research purposes, constructs, and variables were not indicated in the survey. Scales and items were reordered randomly. Group responses for all constructs were conceptually aggregated at the workgroup level. Additionally, the data were completed at different times, Time 1 and Time 2. For example, transformational leadership, change commitment, and job satisfaction data were acquired at Time 1, which was two weeks earlier than cooperative conflict resolution data. This reduces the ability of respondents to recall prior responses, which helps minimize common source bias which could potentially inflate the theoretical relationships. *Post hoc* testing was conducted in later analysis.

Analysis

   In a multi-level study individual-level data are usually used to measure group-level constructs (Bliese, 2000), so one must show the data can

be measured at a group level and carefully consider the issue of matching between theoretical constructs and empirical measurements. Thus, these conceptual issues (validity) were addressed first, and then the intraclass correlation coefficient (ICC) was examined for the reliability of aggregated perceptions in later analysis. The constructs of interest can be conceptually aggregated on a group level and the aggregation justified using within-group agreement (ICC1) and between-group differences (ICC2) (e.g., the statistical evidence of inter-rater agreement and reliability). For example, the two proposed mediators, job satisfaction and change commitment, are by their nature individual-level constructs. However, the dependent variable, cooperative conflict resolution, is a group-level construct. Therefore, the variables should be designed to operate at the same level, which means that job satisfaction and change commitment are directly operationalized as group-level constructs. The item measurements are designed at the group level, which is derived from the operation of team job satisfaction and team change commitment. Such a team construct-based design is closely connected to the common agreement and perceptions of the workgroup members (group level) (Klein, Conn, Smith, & Sorra, 2001). Differences in the subordinates' perceptions of leader behavior occur because perceptions can differ from person to person (Cavazotte, Moreno, & Hickmann, 2012); here, Klein, *et al*.'s (2001) referent-shift consensus approach is applied, in which the items inquiring about the workgroup leader are worded (e.g., using "we" or "members here") in such a way as to direct the respondents' attention to members' general experiences/common feelings. It is assumed that members hold the common views of the workgroup (group level).

Clearly, it is vital to apply Bliese's (2000) multilevel (research) approach, which checks whether an individual rating can be used to form a sufficient assessment of a group-level construct. This is done by aggregating individual-level ratings to the group level, requiring sufficient agreement and reliability among different raters. Accordingly, the aggregated (average) ratings of workgroup members are utilized to understand how leadership influences subordinates' attitudes and behaviors. Thus, in the current study, the mean ratings of workgroup members were analyzed using two scores: within-group agreement (ICC1) and between-group differences (ICC2) (James, 1982). The Spearman-Brown test was applied for the ICC1 and ICC2 to find the reliability and the inter-rater agreement for the measures. ICC1 and ICC2 values for transformative leadership, job satisfaction, change commitment, and cooperative conflict resolution measures were .33, .34, .37, .42, and .87, .86, .86, and .84, respectively. Since the ICC1 ranged from .00 to .50 and ICC2 exceeded the recommended value of .70, it was deemed appropriate to study the data at the workgroup level.

Measures

   Transformational leadership.—The leadership construct developed by Podsakoff, *et al.* (1990) was used. The scale includes 23 items divided into six factors. For example, some items are: "Has a clear understanding of where we are going," "Paints an interesting picture of the future for our group," and "Gets the group to work together for the same goal." This is a 5-point scale, and possible questionnaire responses ranged from 1: Very little to 5: Very much. The analyses of reliability for each variable were conducted using aggregated data. Cronbach's αs for each of these factors were .89, .90, .89, .88, .89, and .90, respectively, consistent with previous studies where α ranged from .84 to .96 (Podsakoff, *et al.*, 1996; Herold, *et al.*, 2008; Zhang, *et al.*, 2011).

   Job satisfaction.—Job satisfaction was measured using the short Minnesota Satisfaction Questionnaire (MSQ) form (Weiss, Dawis, England, & Lofquist, 1967). For example, some items are: "The chance to do things for other people," "The chance to work alone on the job," and "The chance for advancement on this job." A meta-analysis by Podsakoff, MacKenzie, Ahearne, and Bommer (1995) showed that values of Cronbach's α reported in the literature over the past three decades had a range from .70 to .82. Here, the overall Cronbach's α was .82. This is a 5-point scale, and possible questionnaire responses ranged from 1: Very dissatisfied with this aspect of my job to 5: Very satisfied with this aspect of my job.

   Change commitment.—Herscovitch and Meyer (2002) utilized a multidimensional construct to measure the three types of change commitment in the workplace (affective, α = .94; continuance, α = .71; normative, α = .78). In subsequent studies, the values of Cronbach's α ranged from .79 to .93 (Herold, *et al.*, 2008; Yang, 2011a, 2011b). Here, change commitment was measured (overall Cronbach's α = .84) with the same scale as in previous studies (e.g., "It would be risky to speak out against this change"). This is a 5-point scale, and possible responses ranged from 1: Very little to 5: Very much.

   Cooperative conflict resolution.—Somech, *et al.* (2009) detailed several aspects of the employee's cooperative conflict resolution of difficulties with others in the workplace (overall Cronbach's α = .83). In this study, cooperative conflict resolution was measured (overall Cronbach's α = .77) using the same 7-item scale. For example, employees may handle disputes by "finding solutions to a problem that satisfy [their] expectations," "bringing all [the] concerns out in the open so that the issues can be resolved," and "collaborating to come up with decisions acceptable to [them]." This is a 5-point scale, and possible responses ranging from 1: Very little to 5: Very much.

TABLE 1
HIERARCHICAL NESTED MODEL ANALYSIS FOR THE SIX COMPETING MODELS

Model	Model 1		Model 2		Model 3		Model 4		Model 5/Model 6	
Paths	Est	SE	Est	SE	Est	SE	Est	SE	Est	SE
TL → CR	.26‡	.10	.09	.13	.22†	.10	.03	.14	.08/.08	.14/.14
JS → CR	.58‡	.14	.60	.17	.58‡	.14	.60‡	.17	.66‡/.66‡	.25/.25
CC → CR	.49‡	.13	.48‡	.13	.47‡	.13	.47‡	.13	.22†/.22	.20/.20
TL → JS			.60‡	.12			.64‡	.13	.39‡/.62‡	.10/.12
TL → CC					.34‡	.08	.38‡	.09	.35‡/−.04	.08/.10
CC → JS									.65‡ (M5)	.12 (M5)
JS → CC									.64‡ (M6)	.14 (M6)
					Model Fit Summary					
χ²	1169.23‡		1112.06‡		1139.35‡		1074.67‡		1020.21‡	
df	726		725		725		724		723	
χ²/df	1.61		1.53		1.53		1.48		1.41	
CFI	.911		.922		.917		.930		.940	
TLI	.904		.916		.911		.924		.936	
RMSEA	.042		.040		.041		.038		.035	
AIC	1357.23		1302.06		1329.35		1266.67		1214.214	
ECVI	3.99		3.83		3.91		3.73		3.57	

Note.—Est = estimates; *SE* = standard error. Model 5 and Model 6 present an equivalence model, which shares the same values as the model fit summary. †*p* < .01, ‡*p* < .001, two-tailed.

RESULTS

Data Checks

Internal consistency, factor validity, and model fitness indices were obtained by Cronbach's α analysis and CFA as described above. To assess the inter-relationships described above, the AMOS software was applied with 1,000 bootstrap samples. Figure 2 presents the full SEM results for the combined measurement-structural models which are generally considered adequate: χ^2 = 1020.21, *df* = 723; χ^2/df = 1.41, *p* < .001; CFI = .94 and TLI = .94; RMSEA = .04. In addition to evaluating each competing model, the following indices for model comparison are given: Akaike's Information Criterion (AIC) = 1214.21, Expected Cross-Validation Index (ECVI) = 3.57. These common indices allow assessment of the best model fit (Table 1).

While the leadership measures for this study were based on the members' mean ratings, the leaders' self-reports may have reduced common method variance, expected to inflate the size of its relations with the other variables (Chang, Witteloostuijn, & Eden, 2010). Since a single factor
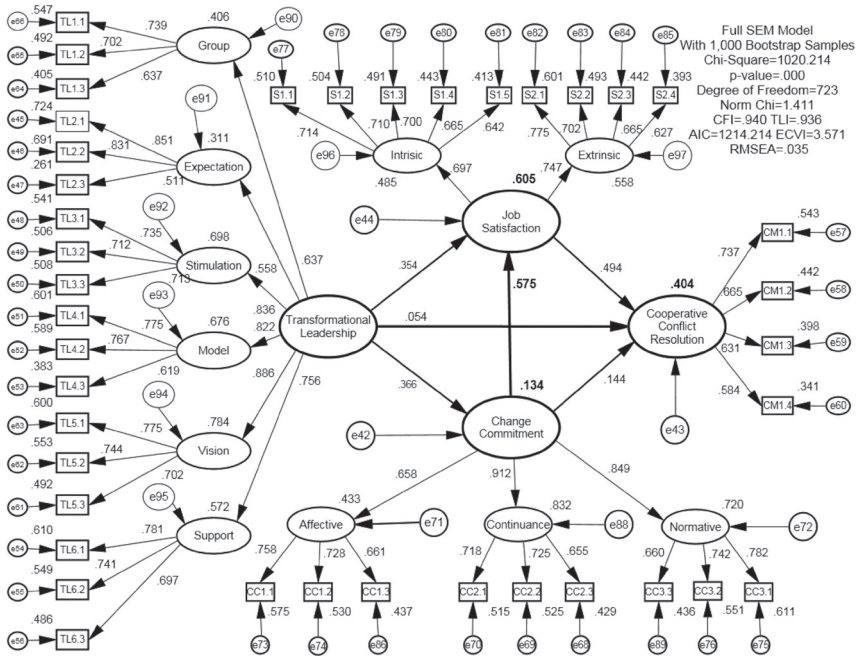
Fig. 2. The full SEM results for the combined measurement-structural models, evaluation of six competing models.

did not emerge from the analysis, and since the first factor accounted for 9.09% of the variance (50% or less), common methods variance was not a problem. Also, Podsakoff and Organ's (1986) two alternative models were utilized. For example, the first model contained a full model controlling for common method, a procedure used to parcel out the items of the first factor (e.g., 9.09 % of the variance) from the four constructs prior to testing the influences of the first factor as a control variable with leadership, change commitment, and job satisfaction on cooperative conflict resolution. Here, a $\Delta R2 = .28$ (p<.01) was obtained for the models. Without the first factor involvement, a value of $R2 = .30$ (p<.01) was obtained from the full model, which contained the original scales of influence of the leadership, change commitment, and job satisfaction on cooperative conflict resolution. Since the values of $\Delta R2$ and $R2$ were very close, CMV was not a major issue in the results. The transformative leadership variable was within normal range[3] ($M = 3.89–4.02$, $SD = 0.57–0.72$, individual ratings

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[3]Criteria were: mean, median, and mode values were very close; the SDs were small; and the overall SD divided by the range was < 5.00.

range 2.00 to 4.00; mode and *mdn* = 4.00). Results also showed no violation of the residual assumptions, because skewness (–0.37–0.03) and kurtosis (–1.01–0.68) were within criteria. Utilizing the same procedure above with the basic normality checks and range tests on the other variables, variables were normally distributed.

Cross-validation testing is necessary to reduce capitalization on change due to possible data-driven reasons, which allows the current results to be discussed for generalization in a later section (Diamantopoulo & Siguaw, 2000). In other words, the result should help determine whether the current study models can be fitted possibly with other data while using other samples. Thus, two subgroup samples of 161 (47.21%) and 180 (52.79%) were randomly selected (by the SPSS program) from the original data set. With 1,000 bootstrap samples, the results of the nested model comparisons showed that each model's change in CFI and TLI ($p > .05$) did not exceed the recommended rule of thumb ($\Delta CFI \leq .01$ and $\Delta TLI \leq .05$). This indicates that the theoretical model is sufficient to meet the needs of cross validation. There difference between the two random samples in term of the measurement weights, structural weights, structural covariances, structural residuals, and measurement residuals was statistically non-significant.

Analysis of Alternative Models

For Model 2, the present study applied Preacher and Hayes's (2008) multiple mediation procedure, testing for one mediator (e.g., job satisfaction) while controlling for the other mediator (e.g., change commitment). The mediation results for Model 2 are statistically significant, based on Baron and Kenny's (1986) three-path regression analysis and Sobel test (testing the indirect effect for a significant difference from zero). However, assuming that the data are distributed normally, the increase in Type I errors, due to the multi-regression use for path linkages, means that the results cannot be generalized. Therefore, the re-sampling approach was utilized with a dataset of 1,000 bootstrap samples and applied bootstrap-based methods incorporated with SEM for attaining the statistically significant mediation (Hayes, 2012) (Table 2). Utilizing the same procedures as described above, the mediation results for Model 3 were statistically significant.

For Model 4, with multi-mediator involvement, it is hard to assess which factor is the mediator because the two specific indirect effects share the same total effect (e.g., the path: leadership→ cooperative conflict resolution). Therefore, MacKinnon's (2011) PRODCLIN2 was used to evaluate the distribution of product estimate for mediation assessment. The results indicated that job satisfaction had a higher mediating effect than change commitment, as shown by the specific ratios (Preacher & Hayes, 2008) of .68 resulting from the single indirect effect (.64*.60) divided by the total indirect effect (.64*.60) + (.38*.47), and the specific ratio of .32 resulting

TABLE 2
RESULTS OF BOOTSTRAP-BASED METHODS AND PRODCLIN2 FOR THE MEDIATIONS

Mediator: Job Satisfaction	Bootstrap-based Method[b]					MacKinnon's PRODCLIN[c] 95% CI
	Product of Coefficients			Bias-corrected 95% CI	Percentile 95% CI	
	Estimate	SE	Z[a]			
Total effect	.56	.16	3.39	.30, .94	.31, .95	
Indirect effect	.93	.17	5.33	.25, .93	.25, .93	.20, .89
Direct effect	.07	.16	.43	−.24, .38	−.25, .38	

Note.—1,000 bootstrap samples. SE = standard error, Z = z score, and CI = confidence interval: a. the significance level at $Z > 1.96$; b. excluding the interval of zero for total and indirect effects, indicating statistically significant mediation; c. including (excluding) the interval of zero for direct effect, indicating full (partial) mediation.

from the single indirect effect (.38*.47) divided by the total indirect effect (.64*.60) + (.38*.47).

Model 5 consists of Model 4, described above, in addition to the new mediation path: change commitment→ job satisfaction → cooperative conflict resolution. Altogether, the three paths in Model 5 allowed hypothesizing a proximal-distal mediator relationship for a long-distance intermediation path, e.g., leadership→ change commitment → job satisfaction→ cooperative conflict resolution. However, Model 6 indicated that change commitment was a statistically non-significant mediator, so change commitment did not mediate the influence of job satisfaction on cooperative conflict resolution.

DISCUSSION

All six competing models present adequate structural fit to the data. Model 1 summarizes the direct influence of the leadership, job satisfaction, and change commitment on cooperative conflict resolution. In Model 2, job satisfaction has a simple mediation role in the leadership process because job satisfaction facilitates reciprocal communication and accomplishment of mutual goals, as well as the strengthening of group cohesiveness. In Model 3, change commitment has a simple mediation role in the leadership process since change commitment is related to mutual goal perceptions, sharing members' skills and thereby updating job competence, as well as discussing their common interests and goals. Model 4 combines the multi-mediators of job satisfaction and change commitment in one model. The results for Model 5 clarify the order of the two mediators: the proximal mediation of change commitment and the distal mediation of job satisfaction. Based on the indices recommended for the smallest values of the AIC, ECVI, and Normative Chi-Square (Preacher & Hayes, 2008), Model 5 was the best fitting model of the five.

Proximal-Distal Mediator

Dionne, *et al*. (2004) proposed that leadership promotes workgroup cohesion as well as cooperation for the resolution of problems. Accordingly, the best fitting model (Model 5) presented here suggests probable antecedents, proximal-distal mediation, and subsequent interconnections. It includes several direct effects and the three indirect effects. The study at the customer center explored the essential needs of the group members for working together and cooperating to resolve conflicts so they can offer quick and accurate responses to customers anywhere at any time (Yang, 2012a). Model 5 proposes that cooperative conflict resolution is influenced by leadership, job satisfaction, and change commitment. Change commitment may focus on common group goals, as well as foster collaboration and interdependence, functions that promote cooperative problem resolution. Job satisfaction helps individuals realize the importance of having pleasurable reactions to job involvement and motivation, and this promotes conflict resolution. Previous studies have mentioned that with the existence of diversity in the group members are more likely to seek the leader's support for cooperative conflict resolution (Herold, *et al*., 2008; Yukl, 2012). That is, change commitment and job satisfaction depend upon the leadership and the effects of the resolution. The relationship is reasonable because it encourages group members to consider each other's job needs through sharing common goals, values, and interests.

Implications

Model 5 also includes three types of mediation, highlighting how job satisfaction mediates the influence of change commitment on cooperative conflict resolution in addition to the proximal and distal mediators discussed above. For example, the customer center usually consists of service workgroups (divisions) containing first-line counter staff, phone-line servicers, investment specialists, etc., who have direct conversations with customers. In practice, the members' job satisfaction depends on change commitment, and this affects the resolution. For this reason, while the members' job satisfaction is enhanced by group cohesiveness, mutual interests, and common objectives as change commitment, the promotion of job satisfaction helps them foster internal positive job attitudes and intrinsic motivation that helps them reach a more effective and efficient service to customers. Altogether, there are three types of mediation in Model 5, suggesting all the constructs are interconnected for the best model fit.

Insights

Some studies have led to insights inside Chinese society (Hofstede, 1993; Hempel, *et al*., 2009; Zhang, *et al*., 2011). Particularly, Lin (2010) concluded that employees in Chinese society are more likely to act with

harmonization, compromise, and cooperation as the common approach toward conflict solution in the workplace. That is, Zhang, *et al*. (2011) believed that less competitive and less confrontational styles of conflict resolution are adopted in both China and Taiwan because a low concern for others is regarded as a negative trait. With the new findings of cross validation obtained in the current study from the two random samplings, possible insights for other life insurance organizations within Taiwan is suggested. Yen, Barnes, and Wang (2011) reported that Chinese society generally (China, Hong Kong, Taiwan, etc.) has greater emphasis placed on interpersonal cooperative relationship at workplace. The long tradition of exercising interpersonal cooperative relationship gives the organization the advantage shown in the several studies. Particularly, while cooperative conflict resolution is associated with interpersonal relationships (Shou, Guo, Zhang, & Su, 2011), Snell, Tjosvold, and Su (2006) found that the managers and employees are able to manage conflict positively in Chinese society. Generally, Zhou, Wu, and Luo (2007), Hempel, et al. (2009), and Yang (2012b, 2012c) suggested that the cooperative resolution style is related to interpersonal job cooperation to better communication over conflict, develop good work relationships, and intend to build positive social exchange. Interpersonal cooperation relationship naturally creates a more cooperative type of conflict resolution aimed at promoting interactive relationships. Here, the results show how leadership can enhance cooperative conflict resolution through the proximal mediation of change commitment and the distal mediation of job satisfaction, while at the same time having strong interdependent relationships between the workgroup members and their managers.

Some studies have discussed insights to organizations outside Chinese society (Utley, *et al*., 2011; Zhang, *et al*., 2011; Yukl, 2012). For example, leadership has been found to enhance the three constructs by communicating values that inspire group members to aim for customer service quality (MacKenzie, Podsakoff, & Rich, 2001), creating mutual goals and common interests (Herold, *et al*., 2008), and encouraging coordination, interdependence, and communication with each other for conflict resolution (Dionne, *et al*., 2004). Utley, *et al*.'s (2011) broad reviews support the empirical results for the relationship between leadership and human services, sales, and business operations in multi-cultural societies (e.g., Australia, Canada, etc.). Current results show a proximal-distal mediator relationship (e.g., change commitment and job satisfaction, respectively) in leadership. With manipulation to carry out the intermediations, the influence of leadership can be enhanced to improve the resolution style. That is, how leadership can facilitate workgroup members to work cooperatively (change commitment) to ensure job motivation positively (job satisfaction) toward the problem resolution. Accordingly, the present results can be expected to

be applicable to a service environment where there is a statistically significant influence upon both the dyadic leadership and workgroup attitudes leading toward implementing customer relationship management and responding to customer requests.

Future Studies

Most previous studies have used cooperative conflict management as a mediating variable that has effects on such outcomes as team innovation and productivity. It would be very interesting to explore this issue. Earlier empirical studies have found that commitment explained less than 17% of the variance in transformational leadership; job satisfaction explained less than 41% of the variance in transformational leadership. While leadership trust has found to be associated with leadership and the solution (Podsakoff, *et al*., 1990; Bass, *et al*., 2003; Yang, 2012b), it would be interesting to examine leadership trust in the future, and discuss the mediating roles of job satisfaction, change commitment, and leadership trust on the influence of leadership on conflict resolution. Other approaches could be utilized in the future as well. For example, the issue of mediation interactions could be explored (Preacher & Hayes, 2008).

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