Gender Differences in Decision Satisfaction Within Established Dyads: Effects of Competitive and Cooperative Behaviors

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ABSTRACT

The research develops and tests a model of gender differences on the effects of competition and cooperation on decision satisfaction. It was hypothesized and found that males' satisfaction is dependent on their ability to impose their preferences on their female counterpart within a mixed-gender dyad. In contrast, females' satisfaction is only affected by the degree to which dyad members behave cooperatively. The model is tested within the context of 76 mixed-gender dyads that are in an established relationship. The dyads are sampled from shoppers at a national retailer, and report on their decision-making process as they exit the store. A partial-least-squares (PLS) methodology is used to test for differences in the effects of cooperative and competitive behaviors on males' and females' satisfaction with a dyadic decision. © 2006 Wiley Periodicals, Inc.

The concepts of cooperation and competition are fundamental to understanding interpersonal and intergroup relations. Cooperation exists when people work together to achieve a mutually satisfying outcome, whereas

competition can be characterized as a zero-sum game in which one person wins and the other loses (cf. Tjosvold, 1984). From this perspective, people in a decision-making dyad cooperate when they seek a mutually satisfactory result that reflects the preferences of both parties, whereas they compete when they attempt to impose their preferences on each other. Deutsch (1949) argues that the tendency to cooperate or compete depends on the nature of the interdependence between the parties. Cooperation occurs when group members are positively interdependent such that each person only achieves his or her goals if others also achieve their goals. In contrast, competition results when the group members are negatively interdependent such that each person can reach his or her goals only if others do not reach their goals.

The degree to which members of a decision-making dyad act cooperatively or competitively has implications for how satisfied they are with a joint decision or result. Consider the possible effects of competitive behaviors on the satisfaction of two friends in which A is the influencing agent and T is the influence target. To simplify, the example is from A's perspective only. If A and T have different preferences but A has more power, A is able to impose his or her choice on T through influence. To the degree that the dyadic decision is consistent with A's preferences, A should be satisfied. In contrast, if A has less power than T, by definition T has the ability to resist A's influence attempts (though he or she may choose to acquiesce). The inability to influence T is likely to lead to disappointment and frustration for A because the friends have different preferences. Thus, decision satisfaction is contingent on the use of power and influence within the dyad, and the outcomes that are achieved.

Although power and influence are essential to competition, they are much less important when people cooperate. If A and T cooperate, they are focused on achieving a mutually beneficial or satisfying outcome. In order to do so, they must engage in a two-way exchange of information to generate a common understanding of the issues affecting the decision. They must also be responsive to each other in order to work toward an outcome that reflects both their preferences. A and T's relative power is largely immaterial because they are positively interdependent; that is, A enhances his or her own satisfaction by increasing T's satisfaction, and vice versa. By definition, A and T are not interested in imposing their individual preferences on each other when they act cooperatively. Thus, whereas competitive behaviors increase satisfaction only when they are successful (i.e., supported by power), cooperative behaviors such as information sharing have a generally positive effect.

Given this model of the effects of cooperative and competitive behaviors on satisfaction, do gender differences exist in either the frequency of these behaviors or their effects on satisfaction within decision-making dyads? Research on gender and decision making suggests that men and women have very different interaction styles within newly formed groups. Males tend to act competitively within mixed-gender dyads in order to

assert their dominance (Tannen, 1990), and pursue leadership positions (cf. Ridgeway, 1982). They are also more likely than females to make competitive choices that result in win–lose or lose–lose outcomes (Walters, Stuhlmaker, & Meyer, 1998). Males' competitiveness is thought to be a natural extension of their pursuit of agency, a metaconstruct that refers to a mode of relating to the world by striving for mastery and power (Wiggins, 1982). In contrast, females emphasize cooperative interactions that establish and maintain interpersonal connections such as agreeing with or supporting the statements of others (Bales, 1970). From Bakan's (1966) perspective, this is a reflection of a feminine emphasis on communion, defined as a cooperative orientation that stresses interpersonal connections, contact, and solidarity. Meta-analyses support gender differences in interaction styles, finding that males tend to establish their position within groups through task-related achievement, whereas females emphasize interaction behaviors that are social or communal in nature (e.g., Eagly & Karau, 1991).

Despite masculine and feminine orientations toward agency and community, respectively, gender differences in interaction styles tend to disappear as dyad or group members become acquainted. For example, Wheelan and Verdi (1992) found no significant gender differences in seven categories of verbal behaviors between 30 and 60 minutes after group formation. Similarly, Wood and Karten (1986) found that gender differences in interaction styles vanished when group members had explicit information about an individual's leadership ability. The authors argue that members of newly formed groups initially act in a way that is consistent with stereotypical gender roles in order to manage uncertainty and avoid conflict within the group. Once acquainted, individual-level knowledge overrides these stereotypes, and interactions become increasingly based on individual skills and inclinations.

It remains to be seen, however, whether gender differences exist in the gratification or pleasure that results from undertaking competitive and cooperative behaviors within established dyads. As argued by Bakan (1966), agency and communion are fundamental worldviews that affect males' and females' perceptions, attitudes, and behaviors across a variety of contexts. It is therefore reasonable to expect that these worldviews or orientations are influential even within established dyads, despite the absence of differences in observed behaviors. One explanation for previous null effects in studies using observed or self-reported behaviors is that visible behaviors are shaped by self-presentational concerns that reduce the potential to find gender differences (cf. Fisher, 1993; Leary, 1996). As a result, the present research assesses gender differences in cooperation and competition with the use of their effects on decision satisfaction as an indirect or implied measure of what is gratifying or pleasing.

Based on the work of Bakan (1966), cooperative behaviors should be a significant predictor of decision satisfaction for both males and females,

but the effect is expected to be stronger for females because of their communal orientation. In contrast, it is hypothesized that males' agentic orientation will lead them to emphasize their ability to impose their preferences on their female counterpart when they compete. The research is important because it informs a variety of contexts in which males and females interact to make joint decisions. Organizational research indicates that women are less effective than men in negotiating starting salaries and career advancement opportunities (Barron, 2003). Gender differences in negotiation or bargaining strategies also have implications for management effectiveness (cf. Walters et al., 1998). In consumer behavior, gender differences in interaction and bargaining strategies have the potential to affect both relationship and decision satisfaction (Fisher & Grégoire, 2003). Finally, the research contributes methodologically by using partial least squares to represent interaction terms as latent variables. The benefit of this approach is that it accounts for the often substantial measurement error associated with interaction terms in traditional moderated regression (cf. Chin, Marcolin, & Newsted, 2003).

Competitive Versus Cooperative Behaviors

As discussed earlier, a state of competition exists when members of a dyad strive to impose their preferences on each other, whereas cooperation occurs when they work together to achieve a mutually satisfying purchase or consumption decision (cf. Deutsch, 1949). These definitions are consistent with Thomas's (1976) conceptualizations of competition and a specific form of cooperation he calls collaboration within his typology of conflict-handling orientations. Thomas defines a competitive orientation as one in which one member of a dyad possesses a strong desire to satisfy his or her own concerns and a weak desire to satisfy the concerns of the other dyad member. The goal of competition is to dominate the decision process and force one's preferred solution or decision on the other party (cf. Walters et al., 1998). The definition of cooperation used in the present research is consistent with Thomas's concept of collaboration, which is defined as a strong desire to satisfy both one's own and the other dyad member's concerns. The goal of cooperation is to find an integrative solution that incorporates and reflects the views of those involved. Cooperation is therefore distinct from accommodation, in which the goal is to appease the other with little regard for one's own concerns or needs. Accommodation is not mutually satisfying, because one person sacrifices his or her preferences to please the other member of the dyad. Cooperation requires that both parties are actively involved in representing their preferences within the decision making process.

Although cooperation and competition are generally considered opposite ends of the same continuum, it is apparent that most interpersonal interactions cannot be classified as purely competitive or cooperative. Deutsch (1949) illustrates this point by observing that the members of

a basketball team can be cooperative with respect to winning a game, but competitive when it comes to being the star of the team. By extension, cooperative and competitive behaviors can occur simultaneously within many decision-making contexts—for example, a husband and wife dyad might be cooperative in their desire to purchase a new automobile, but remain competitive with respect to their preferences for various brands or features. Two friends cooperate in the selection of an apartment, but at the same time attempt to impose their individual preferences with respect to location, amenities, or prices.

Finally, it is important to note that competition and cooperation are both driven by self-interest. Under competition, the role of self-interest is obvious because the goal is to win. But under cooperation, the desire to satisfy the self coexists with the desire to satisfy the other. For example, a husband and wife are motivated to cooperate because it enables them to avoid conflict that might be detrimental to their relationship. The couple recognizes that their positive interdependence is not limited to the decision under consideration, but rather extends to the stream of decisions and interactions that are expected to occur over the life of their relationship. This perspective has led Van de Vliert (1997) to describe cooperation and cooperation as "overlapping and interlocking drives" that enable people to achieve what is in their own best interests (p. 235).

Hypotheses

Effects of Cooperative Behaviors on Decision Satisfaction. People within established, voluntary relationships are typically positively interdependent and are therefore motivated to cooperate. Cooperation within a dyad or group is characterized by a two-way dialogue in which the participants listen and respond to the other's ideas, comments, and arguments. Cooperative exchanges ensure that the views and ideas of both parties are recognized and incorporated in the final decision. As a result, the information that is conveyed under cooperation tends to be more accurate and helpful than under competition (Deutsch, 1980). Further, cooperation leads to a greater acceptance of and commitment to the resulting decision than competition because both parties have played a significant role in the decision process (Crombag, 1966).

Although both males and females should be more satisfied when they make joint decisions that are based on cooperation, the effect should be particularly strong for females. A communal orientation is associated with expressiveness and understanding that leads to what Bales (1970) calls "positive social behaviors." The desire for community is likely to lead females to value, especially in established relationships, an awareness of and responsiveness to their partner's thoughts and feelings. Research indicates that compared to males, females are more responsive to what they believe are the needs and wants of their interaction partner (Wood & Karten, 1986). Also, females

engage in more behaviors that create a supportive climate within the group and that are necessary for group functioning (Bales, 1970). Whereas male self-esteem is tied to task performance and achievement, female's self-esteem is more a function of their ability to protect and build their relationships with others (Brody, 2000).

As a result, it is hypothesized that cooperative behaviors have a positive effect on both males' and females' decision satisfaction, but the effect is significantly stronger for females. Formally,

> **H1:** The positive effect of cooperative behaviors on decision satisfaction is significantly stronger for females compared to males.

Effects of Competitive Behaviors on Decision Satisfaction. Power and influence are closely related but distinct constructs. Whereas power is broadly defined as the ability of one person to affect the behavior of another (French & Raven, 1959; Kelman, 1961), influence is defined as the outcome or effect that occurs from the successful exercise of power. Influence is attempted or achieved through persuasive communication behaviors such as threats, requests, and coercion (cf. Davis, 1976). It is important to note that influence attempts imply not only that asymmetrical preferences exist within the dyad—otherwise the use of power would be unnecessary—but also that an adversarial context exists such that if one person wins, the other loses. In this way, influence attempts are competitive behaviors because the agent is seeking to force or pressure the target to accept his or her position.

The effectiveness of an influence attempt is a function of the source and level of power held by the influencing agent (Eagly & Chaiken, 1993; French & Raven, 1959). For instance, in a decision context in which a parent and child have asymmetrical preferences, the parent might gain the child's obedience by threatening punishment. Similarly, a student might successfully pressure his or her roommates to wash the dishes after a meal is consumed because he or she owns the only automobile in the household. In both cases, success within a competitive decision context depends on the influencer's perceived ability to provide or withhold a desired resource.

Given that power and agency are inextricably linked, the successful use of power should be more vital for males than females. When asymmetrical preferences occur within a dyad, power enables the male to dominate the decision process and impose his preferences on his female counterpart. In this situation, the male's satisfaction should be high. In contrast, when his power is low and asymmetrical preferences exist, attempts to impose his preferences will be ineffective. Given that the male stereotype proscribes displays of weakness, dependency, or vulnerability (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972), competitive behaviors should lead to low decision satisfaction when power is low. In contrast, females should place significantly less value than males on the successful imposition of their preferences

within the dyad because of their communal orientation. A communal orientation emphasizes the maintenance of the relationship rather than a specific decision outcome. This logic is formally expressed in the following hypothesis:

H2: Males' (but not females') decision satisfaction is contingent on the degree to which they are able to successfully impose their preferences in the dyad through a combination of high power and competitive behaviors.

METHOD

Data Collection

The data were collected at a national retail furniture store located in a mid-sized North American city. Over a 4-day period, researchers approached all respondent pairs of the opposite sex and over the age of 17 as they left the store. This methodology was chosen because it provided access to adult males and females in a wide range of established relationships. The researchers introduced themselves, explained that they were studying "shoppers' decision processes," and offered respondents $10 each if both the male and female participated in the study. Couples were screened out if at least one member of the dyad had not talked to a salesperson during their visit to ensure that they had considered purchasing something in the store. Couples that agreed to participate in the study were seated in separate locations to ensure that they responded independently. A total of 168 store customers (i.e., 84 dyads) who were shopping with an opposite-sex partner were surveyed for a response rate of 85%. All were engaged in established relationships (i.e., spouse or fiancé). Five dyads were eliminated for missing responses, and an additional three dyads were eliminated for responses with an absolute z value on power greater than 3. Consequently, the final sample size is composed of 152 respondents in 76 dyads. The modal age category is 40–49 years, and the modal number of years the dyad members have known each other is 11–20 years. The average planned expenditure was $1157, and the average actual expenditure was $585. Forty-three percent of respondents made a purchase on the surveyed visit.

Measures

The model is based on four key constructs (i.e., power, cooperative behaviors, competitive behaviors, and decision satisfaction) which are reflected or formed by 17 items. Items were generated from reviews of the literature on cooperation–competition (Tjosvold, 1984), power (Corfman, 1991; Tichenor, 1999), influence attempts (Palan & Wilkes, 1997), and satisfaction (Oliver, 1997), and then the questionnaire was pretested on

five respondents for clarity. Unless otherwise indicated, the measures are based on 5-point Likert scales (scale end points: 1 = strongly disagree; 5 = strongly agree). The psychometric properties of the scales are presented in the results section and the scale items are provided in the Appendix.

Power. Within interpersonal dyads, power can exist at either the relationship or decision levels. At the relationship level is it clear that one dyad member can have an overall power advantage. For example, one person might have more financial resources, popularity, or expertise that leads him or her to be more influential in the relationship (Tichenor, 1999). In general, however, it is unlikely that one person in a dyad would want or be able to dominate all purchase decisions. Consequently, knowing that one person has more overall power provides little information about who makes specific decisions related to such diverse contexts as where to go on vacation, how many children to have, or what to eat for dinner. As a result, and consistent with previous research, power is conceptualized at the level of the specific decision under consideration (Corfman, 1991).

Power was measured with three semantic-differential items anchored with statements about the degree to which each member was responsible for the types of shopping decisions that were made in the store that day. With the use of a 7-point scale, one item was anchored with "My companion has the final say on this type of purchase" (1) and "I have the final say on this type of purchase" (7). The midpoint was labeled "Equal say" (4).

Cooperative Behaviors. Based on the work of Tjosvold and colleagues (Alper, Tjosvold, & Law, 1998; Tjosvold, 1984), cooperation was measured with 6 items reflecting the degree to which the respondents worked together to achieve a mutually beneficial decision. The items included "my shopping companion and I shared our ideas with each other," "my shopping companion and I considered each others' point of view when we made our decision," and "my shopping companion and I worked together to make a decision."

Competitive Behaviors. Competitive behaviors are conceptualized as a formative construct composed of persuasive tactics that consumers might use to impose their preferences on the other member of the dyad. A formative conceptualization is appropriate given that the measures form the construct rather than being a reflection of it (see Bollen & Lennox, 1991). Specifically, individuals attempting to impose their preferences on another might use one influence strategy repeatedly or several different strategies. As a result, a strong correlation between the items in the scale is not necessary or even desirable, and so the use of coefficient alpha is inappropriate for formative constructs (Bollen, 1984).

Based on the conceptual work of Davis (1976), and Palan and Wilkes (1997), the measures include three persuasive strategies associated with the imposition of preferences by one consumer on another. The question stem, "During my visit today, I tried to get my companion to see things my way by…" was followed with, "pressuring him or her to go along with what I wanted" (coercion), "suggesting something bad might happen if we didn't do it my way" (threat), and "suggesting we do something different without giving a specific reason" (request).

Decision Satisfaction. Consistent with Oliver (1997), decision satisfaction is defined as a judgment that the joint decision provided pleasure, gratification, or fulfillment to those involved in the decision-making process. The construct was measured with four items that reflect the extent to which respondents were pleased with the dyad's purchase decision. Examples of these items include "I am very satisfied with the decision we made," "The decision we made was a good one," and "I think we made the right choice."

Control Variables. Three control variables were included that could impact the way shoppers interact when they make a joint decision: the age of the shopper, the dollar value of the purchases on that visit, and the length of the relationship.

Analysis

Dyadic Data. It is expected that the responses within each dyad are not independent because the dyad members are in an established relationship and they are responding relative to the same decision process (cf. Kenny, Kashy, & Bolger, 1998). Parametric tests, such as ANOVA, lose their robustness when the independence assumption is violated, and the degree of bias can be substantial (Kenny & Judd, 1986). When a lack of data independence is expected, the intraclass correlations (denoted as ρ), provides an estimate of the degree of dependence (Griffin & Gonzalez, 1995; Kenny et al., 1998). The larger the value of ρ, the greater the correspondence between the measures taken from individuals within the same dyad. All intraclass correlations are significant ($N = 76$ dyads): $\rho_{\text{cooperative beh.}} = 0.234$ ($p < .05$), $\rho_{\text{competitive beh.}} = 0.433$ ($p < .001$), $\rho_{\text{power}} = -0.217$ ($p < .05$), and $\rho_{\text{satisfaction}} = 0.247$ ($p < .05$). The results indicate that responses within the dyads are not independent for the study's key constructs.

Hypothesis Tests. Given the lack of independence within the data, separate models were run for males and females. The models consisted of cooperative behaviors, competitive behaviors, power, the power by competitive behaviors interaction term, and the control variables predicting decision satisfaction. To test H1, the path coefficients for the effect of cooperative

behaviors on decision satisfaction for females versus males were compared. For H2, the path coefficients for the effect of the interaction term on decision satisfaction across the male and female samples were compared.

Partial Least Squares. Data analysis was conducted with partial least squares (PLS), with the use of PLS-GRAPH v.3.00. Like covariance-based approaches such as LISREL, PLS is a structural equation model (SEM) approach and belongs to a family of techniques that some researchers call the second generation of multivariate analysis (cf. Fornell & Bookstein, 1982). PLS and LISREL have different objectives (Chin, 1998; Fornell & Bookstein, 1982; Garthwaite, 1994; Lohmoller, 1988). LISREL is concerned with fitting covariance matrices, whereas PLS, which is based on an iterative combination of principal-components analysis and regression, aims to explain the variance of each construct. PLS simultaneously considers all path coefficients and estimates individual item loadings in the context of a specified model, and as a result, it enables researchers to avoid biased and inconsistent parameter estimates. Because PLS makes no distributional assumptions, traditional parametric procedures of significance testing are not appropriate. Therefore, this research uses bootstrapping, a resampling with replacement procedure, to estimate the significance of the parameters (Chin, 1998). The use of PLS has been gaining in popularity in dyad/group research (e.g., Duxbury & Higgins, 1991; Howell & Hall-Merenda, 1999; Sosik, Avolio, & Kahai, 1997).

PLS Interaction Terms. Based on recent developments (Chin et al., 2003), PLS has been shown to be an effective analytical tool to test product–term interactions. In typical approaches using OLS regression, summated scales and their interaction term increase the potential for Type II error. To illustrate this limitation, consider the following regression with an interaction term:

$$Y = a + bX + cZ + d\,(X * Z)$$

in which X and Z constitute two continuous summated scales, and X * Z is the interaction effect. If each summated scale captures 70% of the true score and 30% measurement error, then the interaction term is composed of 50% of measurement error (i.e., $0.7 \times 0.7 \approx 0.50$). As a result, typical moderated regression analysis inflates measurement error in the interaction term and reduces the power of statistical tests (see Chin et al., 2003).

The indicators reflecting the constructs in the interaction term are first standardized, and then product indicators are developed by creating all possible products from the two sets of indicators (Chin et al., 2003). In the present study, power and competitive behaviors were each measured with three items, and as a result, the interaction term was measured with nine indicators (i.e., three items * three items).

PLS Subgroup Analysis. Subgroup analysis was performed by com-

paring the path coefficients across the male and female models. The significance of the difference between path coefficients was examined by performing an unpaired t test, which was based on estimates and standard errors generated by bootstrapping (cf., Duxbury & Higgins, 1991; Howell & Hall-Merenda, 1999).

RESULTS

Measurement Models

Consistent with Chin et al. (2003), the adequacy of the reflective measures is assessed by evaluating the reliability of the individual items, the internal consistency of the items measuring the same construct, and the discriminant validity of the constructs. Item reliability is assessed by examining the loading of the measures on their corresponding construct. A common rule of thumb in PLS is to accept loadings greater than 0.7, which implies that more than 50% of the variance in the observed variable is explained by the construct. However, this stringent guideline is often relaxed in context of comparative studies to ensure that the same scales are used across different samples (Duxbury & Higgins, 1991). Items with loadings greater than 0.4 or 0.5 are acceptable and can be included for theoretical reasons or for the sake of consistency with previous measures.

Almost all the loadings of the reflective constructs were greater than 0.7, and the others had acceptable values (i.e., greater than 0.4 and 0.5) across the male and female samples. Only one problematic loading (less than 0.3) was noted for one item of the interaction term in the male sample. This item was deleted in both samples (for the sake of consistency between models). All the loadings of the remaining items are presented in the Appendix.

The Fornell and Larcker (1981) measure of internal consistency was employed. The measure is similar to Cronbach's alpha, but more appropriate for PLS models because it uses loadings generated within the structural equation model. The internal consistency values of all the reflective constructs exceeded the 0.7 guideline suggested by Nunnally (1978) (see the Appendix for details).

Finally, the discriminant validity of the constructs was assessed in two ways. First, an examination of the cross loadings shows that no item loads more highly on another construct than it does on the construct it is intended to measure. Second, the square root of the average variance extracted (SRAV) for each construct was compared to its correlation with the other constructs as a test of discriminant validity (cf. Fornell & Larcker, 1981). As shown in Table 1, all values representing the square root of average variance extracted (for the reflective constructs) are substantially greater than all the corresponding correlations. Table 1 also displays the means, standard deviations, and correlation matrices.

Table 1. Descriptive Statistics and Correlation Matrix.

Construct scale	No. Items	Male M	Male SD	SQAV[1]	Female M	Female SD	SQAV	1	2	3	4	5	6	7	8
1. Decision satisfaction	4	4.28	.79	.90	3.99	1.14	.92	—	.35	-.35	-.16	.12	.21	-.12	.06
2. Cooperative behaviors	6	4.39	.60	.82	4.36	.70	.86	.32	—	.00	.13	.08	.29	.00	.25
3. Competitive behaviors	3	1.69	.93	—	1.61	1.04	—	-.27	-.18	—	-.06	.00	.08	.08	-.10
4. Power	3	3.94	.93	.70	3.93	.73	.70	.09	.02	.12	—	-.15	-.11	.16	.05
5. Power*Competitive b.	8	.15	.73	.67	.00	.65	.74	.21	.05	.17	-.02	—	.39	-.12	-.04
6. Age[3]	1	3.34	1.29	—	3.55	1.31	—	.19	.14	-.21	.05	-.02	—	.15	.47
7. Value of purchase ($)	1	614	992	—	556	1263	—	.10	-.04	.05	.14	-.25	.02	—	.07
8. Length of the relation[4]	1	3.34	1.28	—	3.36	1.26	—	-.13	-.12	-.15	-.02	-.26	.39	.01	—

[1] Square root of the average variance extracted.
[2] Correlations for the male sample are in the lower triangle, and correlations for the female sample are in the upper triangle.
[3] The age scale has six categories coded from 1 to 6: "18-21," "22-29," "30-39," "40-49," "50-59," and "60 or older."
[4] Length of relationship has five categories coded from 1 to 5: "0-1 year," "2-5 years," "6-10 years," "11-20 years," and "20 or more years."

Structural Model and Test of Hypotheses

Table 2 reports the path coefficients (γ) and t values for the two models, along with the R^2 for decision satisfaction.[1] The t values were computed on the basis of 500 bootstrapping runs. In the male sample, cooperative behaviors have a positive effect ($\gamma = 0.253$; $t = 1.95$; $p < .05$), whereas competitive behaviors have a negative effect ($\gamma = -0.283$; $t = -2.16$; $p < .01$) on decision satisfaction. The power by competitive behaviors interaction effect has a positive and significant effect on the dependent variable ($\gamma = 0.251$; $t = 2.12$; $p < .01$). The results indicate that the more power males possess, the more competitive behaviors lead to decision satisfaction. For males the relationships between the three control variables and decision satisfaction are not significant.[2]

Similar effects of cooperative and competitive behaviors were observed for females. As for males, cooperative behaviors have a positive effect ($\gamma = 0.344$; $t = 3.29$; $p < .001$) and competitive behaviors have a negative effect ($\gamma = -0.354$; $t = -1.83$; $p < .05$) on decision satisfaction. Neither

Table 2. Effects on Decision Satisfaction.

	Males		Females	
	γ	t Value	γ	t Value
Main effects				
Cooperative behaviors	.253	(1.95)**	.344	(3.29)*
Competitive behaviors	-.283	(-2.16)*	-.354	(-1.83)**
Power	.124	(.78)	.060	(.29)
Interaction term				
Power * Competitive behaviors	.251	(2.12)*	.146	(.92)
Control Variables				
Age	.154	(1.56)	.147	(1.06)
Value of purchase	.028	(.27)	.235	(3.17)*
Length of relationship	-.136	(-1.23)	-.084	(-.60)
R^2	.265		.352	

Note: * $p = .01$; ** $p < .05$ (one-tailed distribution).

[1] The hypotheses were also tested with a more typical analytical approach. Building on the work of Sharma, Durand, and Gur-Arie (1981), the moderating role of gender in this research can be viewed as a typical *homologizer* variable. This type of moderator influences the strength of the relationships without being related to the dependent variable and the independent variables. This is the case in this research: As indicated in Table 1, gender is not related to any other variables in the model. For this type of moderation effect, the error term is function of the conditions stipulated by the moderator variable, that is, gender. This is a classic case in which subgroup analysis is acceptable and recommended. As noted by Sharma et al. (1981, p. 292): ". . . partitioning the total sample into homogeneous subgroups with respect to the error variance should increase the predictive efficacy of the classic model for specific subgroups." So, the results of OLS regressions for males and females almost perfectly mirror those using PLS.

[2] It was hypothesized that the value of the purchase made during the store visit or the length of the dyadic relationship might interact with the interaction styles (i.e., cooperative versus competitive behaviors). Consequently, the multiplicative interaction terms were included sequentially in the final model. None of the multiplicative terms had a significant effect on decision satisfaction ($p > .12$) in either the male or female models.

power nor the power by competitive behaviors interaction term have a significant impact on the decision satisfaction experienced by females. Among the control variables, only purchase value has a significant and positive effect on decision satisfaction.[3]

Males' and females' path coefficients were compared with the use of the procedure described earlier. As predicted in H1, the path coefficient associated with cooperative behaviors is significantly larger in the female compared to male sample ($t = 7.47; p < .001$). In addition and consistent with H2, the interaction effect between power and competitive behaviors is significantly greater for males compared to females ($t = 6.13; p < .001$). The main effects of power ($t = 1.49; p > .05$) and competitive behaviors ($t = 0.51; p > .05$), do not significantly differ between the genders.

The procedure recommended by Cohen and Cohen (1983) was used to better understand the interaction between power and competitive behaviors for males. The relationship between the frequency of competitive behaviors and power is plotted in Figure 1. Standardized values of –1 and 1 were used for power, and –0.7 and 1 for competitive behaviors. The value –0.7 for competitive behaviors is employed because it is the smallest found in the sample. Figure 1 reveals that the effect of power is pronounced when males behave competitively. When males had low power, a high frequency of competitive behaviors led them to experience a low level of decision satisfaction. On the other hand, their decision satisfaction significantly increased when they acted competitively and had the power to impose their preferences on their female counterpart. This effect is very different from the one observed for females in which power had no effect, directly or through its interaction with competitive behaviors, on decision satisfaction. Acting competitively always reduced the satisfaction of females regardless of their ability to influence the dyadic decision (see the main effect of competitive behaviors illustrated in Figure 1 for females).

DISCUSSION

Gender Differences

In contrast to research on newly established groups, the present research found that males and females in established relationships were orientated toward agency and community, respectively (Bakan, 1966). Within an everyday shopping environment, and with decision satisfaction used as an indirect method of assessing the tendency of males and females to prefer decisions based on agency and community, the research found

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[3] Additional models for males and females were estimated for the 12 dyads in which both respondents indicated that they had either higher or lower power than their partner in the dyad. The hypothesis was that these dyads might differ systematically from dyads in which there was agreement that one member held greater power than the other, or in which the dyad members both agreed that they had equal power. For the remaining 64 dyads the results were consistent with those reported in the manuscript and supportive of the hypotheses. In these models, the interaction term (Power * Competitive Behaviors) for the males' model is significant ($\gamma = 0.323; t = 2.94; p < .01$), whereas the interaction term in the females' model was not ($\gamma = -0.001; t = 0.01; p > .90$).
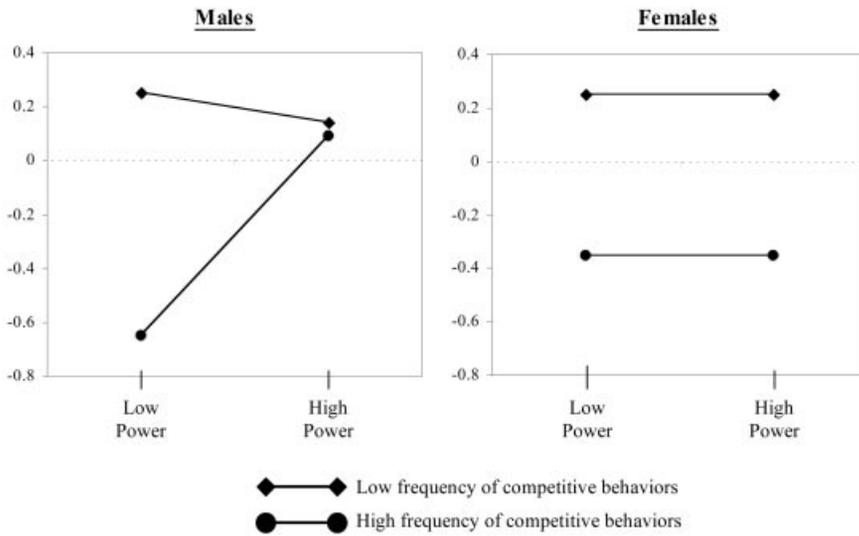
Figure 1. Interaction between power and competitive behaviors predicting decision satisfaction.

that cooperation had a significant effect on decision satisfaction for both males and females. However, the effect was significantly stronger for females compared to their opposite-sex partner. Females appear to place a greater emphasis than males on behaviors that are associated with mutually satisfying decisions. Females were satisfied to the extent that they had engaged in a two-way dialogue that incorporated the preferences of both dyad members in the final decision.

It is important to note that the female emphasis on cooperation is not necessarily driven by a selfless desire to please their male counterpart. Under cooperation, the desire to satisfy the self coexists with the desire to satisfy the other. For example, wives and husbands are motivated to cooperate because it enables them to avoid conflict that could be detrimental to their relationship. A couple's positive interdependence is not limited to the decision under consideration, but rather extends to the stream of decisions and interactions that occur over the course of an established relationship. The present results suggest that females place a greater emphasis than males on behaviors that maintain and enhance their relationship with their spouse or fiancé.

The successful use of power (as demonstrated by the interaction between power and competitive behaviors) had a significant effect on satisfaction only for males. Examination of the interaction effect revealed that males were not more satisfied because they were able to impose their preferences on their female counterpart, but rather that they were significantly less satisfied when they behaved competitively but did not have the power to affect the dyadic decision. It appears that males were

dissatisfied when they were frustrated in their attempts to exert influence. No such effect was found for females. Overall, the results are supportive of previous findings that males' agentic focus leads them to emphasize the use of power to achieve task-related outcomes.

An alternative explanation for the lack of a significant interaction between power and competitive behaviors for females is that compared to their male counterparts they have significantly less power or are less likely to behave competitively. If females in the present sample had less power than their male counterparts, they would not have had the ability to influence the dyad's decision no matter how hard they tried. Similarly, the results might be explained by gender differences in the frequency with which they attempted influence. Given equal power, females might simply be less likely to try to impose their preferences within the dyad. However, neither of these explanations is tenable given no significant gender differences in the level of power or the frequency of competitive behaviors ($p > .50$). The latter result replicates previous null findings of gender differences in the frequency of interaction behaviors in established groups.

Consistent Findings Between Genders. It is important to note that some results were consistent for both males and females. First, when participants engaged in cooperative behaviors, such as listening to their partner and showing an interest in their partner's concerns, both males and females were more satisfied with the final decision. The two-way dialogue that is characteristic of cooperation appears to have led to an interaction style that was valued by all respondents within the dyads in this study. It is proposed that the positive association between cooperation and decision satisfaction can be attributed to both the process and the content of decisions. On the process side, a cooperative approach recognizes and incorporates the unique combination of skills, knowledge, assumptions, and attitudes of each participant. To the extent that the members of the dyad see each other as partners rather than adversaries, differences are dealt with constructively. Cooperation also enhances the perceived quality of dyadic decisions by increasing the likelihood that those involved examine relevant alternatives and their consequences. Finally, though not directly tested in the present research, cooperation has the potential to increase decision satisfaction by building and strengthening interpersonal relationships. Finding a mutually satisfying decision has intrinsic value because it reduces conflict, increases harmony, and communicates respect within the dyad.

Second, competitive behaviors had a negative effect on satisfaction. In general, the more participants used requests, threats, or coercion to impose their preferences on their partner, the less satisfied they were with the dyadic decision they made. This result suggests that competitive behaviors decrease the level of satisfaction for both males and females making joint decisions, independent of whether they are successful in exploiting their power. Such a result can be explained by the increased

conflict and tension that is created by the use of competitive behaviors within the decision process. A final result for both men and women was that power did not have a significant effect on decision satisfaction. Power, by itself, was not a direct determinant of decision satisfaction. Power only has an effect on decision satisfaction through its interplay with the use of competitive behaviors, and only for males.

CONCLUSION

In contrast to previous research on gender differences in the frequency of competitive and cooperative behaviors, this study focuses on the effect of such behaviors on decision satisfaction. Cooperative behaviors, although they had a positive impact on decision satisfaction for both genders, were found to have a greater effect on decision satisfaction for females. This finding is consistent with previous research suggesting that females possess a stronger communal orientation than men. In addition, competitive behaviors led males to experience less satisfaction when they acted competitively but did not have sufficient power to impose their preferences. Competitive behaviors did not lead to more satisfaction for females, even when they had the power to get their way.

In contrast to previous research, the present study found gender differences in the preference for cooperative and competitive behaviors within established groups. It appears that prior research has understated males' preferences for competition and females' preferences for cooperation by examining overt behaviors that are likely to be affected by social-desirability bias (Fisher, 1993). The research adds to a growing understanding of gender differences in consumption contexts such as responses to music (Kellaris & Rice, 1993), gift exchanges (Fischer & Arnold, 1994), and requests for charitable donations (Louie & Obermiller, 2000).

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Table A1: Scales and Measurement Model.

Scale and items	Loadings - Females	Loadings - Males
Decision Satisfaction (females: α = .95; males: α = .95)		
I am very satisfied with the decision we made	.94	.91
The decision we made was a good one	.95	.94
I think we made the right choice	.82	.86
I would make the same decision again	.95	.90
Cooperative Behaviors (females α = .95; males: α = .93)		
During my visit today, my shopping companion and I . . .		
. . . shared our idea with each other.	.84	.73
. . . did what was in the best interests of both of us.	.85	.81
. . . cooperated when we made the decision.	.84	.85
. . . considered each others' point of view when we made our decision.	.86	.90
. . . made a decision that represents how we both feel.	.88	.80
. . . worked together to make the decision.	.90	.85
Competitive Behaviors (formative construct)		
During my visit today, I tried to get my companion to "see things my way" by . . .		
. . . pressuring him or her to go along with what I wanted (COM1).	—	—
. . . suggesting we do something different without giving a specific reason (COM2).	—	—
. . . suggesting that something bad might happen if we didn't do it my way (COM3).	—	—
Power[1] (females: α = .73; males: α = .72)		
My companion has (versus I have) the final say on this type of purchase (Power1).	.45	.41
What my companion thinks (versus what I think) is most important on this type of purchase (Power2).	.83	.99
My companion has (versus I have) the most influence on this type of purchase (Power3).	.76	.58
Interaction "Competition Behaviors*Power" (females: α = .91; males: α = .87)		
Power1*COM1	.66	.48
Power1*COM2	Deleted	Deleted
Power1*COM3	.65	.64
Power2*COM1	.85	.63
Power2*COM2	.85	.47
Power2*COM3	.80	.66
Power3*COM1	.76	.82
Power3*COM2	.67	.73
Power3*COM3	.65	.85

[1] Power was measured with a semantic differential scale. Three points were labelled on the scale "1" indicates less power (in this specific buying context), "4" indicates an equal level of power, and "7" a greater level of power.