Article

Negotiation Power and the Impact of Gender Differences

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Abstract: This study focuses on the intersection of power and gender in negotiations, which is seldom challenged in previous research. In an experiment with 72 negotiators, we consider issue authority as a proxy of power in negotiations and investigate how different power allocations affect the negotiation success. We learn that an increase in issue authority for one of the two parties does not necessarily lead to an increase in success. Especially, female negotiators rely on their negotiation power, rather than systematically improving mutual utilities. This article contributes to Emerson’s power-dependence theory, social role theory, role congruity theory, and gender role conflict theory by combining analyzing the impact of gender differences and power on the success. This study attempts to close the gap in the literature by focusing on the prospective function of gender role orientation in explaining gender differences in negotiation. The theoretical contribution is that females are not per se inferior in negotiations, but their performance decreases in scenarios of power asymmetries. On the contrary, unbalanced power decreases the likelihood of success. Negotiators cannot rely on a power advantage to increase their success.

Keywords: negotiation power; formal negotiation procedure; gender; issue authority

1. Introduction

At the end of each year, negotiations between retailers and manufacturers set the course for the next year. They fix the conditions of their further cooperation and negotiate prices, advertising subsidy, shelf space, retroactive payments, sales promotion and the listing of new products [1,2]. The effectiveness of these negotiations is crucial for success in inter-organizational relations [3,4]. In the light of Emerson’s power-dependence theory and reciprocity theory, one of the recurring topics in retailing is the power asymmetry in the supply channel with its consequences and antecedents [4–6]. Already Rubin and Brown [7] (p. 157) outline interest in the interaction between negotiators: “As bargainers enter into relationships with one another, they bring with them variations in prior experience, background, and outlook that may affect the manner and effectiveness with which they interact”.

The originality arises from the finding that female negotiation dyads are more likely to behave inefficiently in an unbalanced power situation. This research directly addresses the gap outlined by Schaerer et al. [8], that the behavior in low power situations calls for more scholarly research. Information about the counterpart is as crucial as organizing ability, as well as diplomacy and knowledge about the overall circumstances. Research in individual personality traits often lacks significant results [9]. Conversely, an abundance of literature about gender differences in negotiations indicates clear and unambiguous results e.g., [10–12]. A directly related research domain is the field of negotiation power and the power shift [1]. Buyer-seller research usually focuses on personal power of individuals or on organizational power [13,14]. The shift of power in the supply channel toward retailers is a controversially discussed topic in retailing [4,6,15,16]. The role of conflict style and especially cooperativeness is recurring [17–19].
However, little attention has been given to annual negotiations in B-2-B literature. In this paper, we present a comprehensive study about the shift of negotiation power in the context of an annual negotiation task and analyze the force of gender in three different power allocations (balanced, high, low). Power in commercial negotiations does not compensate for insufficient negotiation skills and efforts. Differences in power are likely to diminish the negotiation results. Women, unlike men, are found to be less defensible against the pressure of high negotiation power and to avoid further negotiations. The remainder of this paper is structured as follows. Section 2 provides an overview of the related research. In addition to negotiation power, we discuss the impact of gender on negotiations and develop a set of research propositions. A formal negotiation experiment to evaluate these propositions is outlined in Section 3. In Section 4, we depict the experimental results and relate them to already established knowledge. In the last section, we draw conclusions and outline implications for both practitioners and researchers.

2. Related Research

2.1. Power in Negotiations

In line with social exchange theory, partners with power influence others [20]. Power, the ability to influence the other party, has often been considered as an important factor in negotiations [21]. Power can be defined as individuals’ asymmetric control over valuable resources [22]. Thus, being high in power implies controlling relatively more resources, while being low in power implies having relatively less control over valued resources [8]. It is a structural variable, a property of social relationships, and a psychological property of the individual [23]. Power activates a general tendency to approach, whereas powerlessness causes a tendency to inhibit [24]. Therefore, organizations may actively seek to unbalance the power symmetry [25].

Numerous scholarly works discuss the role of power in negotiations (e.g., [26,27]). It has been shown that experiencing power changes the way in which people view their social environment [24]. Power holders are said to be less willing to take the perspective of their counterparts [28], less prepared [3], less attentive to emotions [29], less likely to trust [30], and more likely to undervalue the contributions of others [31].

In the selling approach, it is expected that balanced power can facilitate flexibility [20]. Interestingly, it has been shown that in situations of power balance between parties, negotiations in which both parties are powerful tend to achieve higher gains in integrative negotiation tasks than in situations in which both negotiators feel less powerful [32]. This might be explained with a higher level of trust. However, the behavior in low power situations calls for more scholarly research [8]. Recent research shows that the effect of power was not mediated by moral reasoning. It is assumed that power activates self-interest within and outside the context in which power is held [33]. Power accelerates action, although power might be irrelevant for a specific situation. Therefore, Galinsky et al. [23] suggest that power-induced action enhances the overall wealth that the powerful have already attained.

2.2. Gender Differences

Gender is one of the most studied characteristic in negotiation research [34]. During the last decades, the scholarly understanding of gender has changed from personality to gender as a factor in the social construction of negotiation situations [35]. Several investigations demonstrated the crucial impact of gender on business-related negotiation processes and their outcomes (see [36] for a review). It was a long debate, if the relatively lower performance of women in negotiations are reflected in inherent gender differences or are a product of social conditioning [37]. Most empirical studies report women being less effective, less tough and less competitive negotiators, and more easily influenced than men e.g., [10,38–40]. They are seen as less likely to initiate negotiations than men [35]. Even recent research shows that negotiations in which at least one of the negotiating parties is a female with a powerful alternative disproportionately often end in impasse, an outcome in
which considerable potential value remains untapped [41]. Otherwise, women are seen as being warm, expressive, nurturing, emotional, and kind [42]. Depending on the degree and character of gender dynamics in a specific situation, the behavior and outcome vary across situations [35].

Most women feel a lack of confidence and are uncomfortable during negotiations; they have a higher aptness to concession than men paired with the orientation to long-term connections [38,42]. As a result, they tend to reach negotiation results below what they could have achieved. Women tend to make the first offer and use early relational strategies [43]. Men expect better results and start with more extreme offers [44,45]. In this vein, already Walters et al. [40] consider women as being less effective negotiators. This supposed disadvantage in negotiations is not necessarily bad, because women can use their cooperativeness positively in integrative negotiations. It remains unclear how these differences influence the negotiation success within settings of different levels of negotiation power.

2.3. Research Propositions

A controversially discussed topic in the literature is the impact of power on the negotiation process and performance [21]. In line with Mannix and Neale [32] as well as Galinsky et al. [23], we assume that different gains are due to the allocation of negotiation power. Considering the issue authority as a proxy of power, we propose:

**Proposition 1 (P1).** The negotiation result is determined by the allocation of the issue authority.

This proposition implies that the results achieved in three different power scenarios, N, M, and MM (which are explained below) are not expected to be equal.

However, different influences related to gender are not mentioned at all. The second proposition is in line with the empirical examination by, among others, Curhan et al. [10] as well as Stuhlmacher and Walters [39], who depict women as being less effective negotiators than men and therefore achieve lower outcomes. The existence of these differences is expected in this study, too. Thus, our second research proposition is:

**Proposition 2 (P2).** The negotiation-result is dependent on gender differences.

Furthermore, we suppose that gender differences can also be found in the scenarios with different levels of negotiation power.

**Proposition 2a (P2a).** Gender differences determine the results in the balanced power scenario.

**Proposition 2b (P2b).** Gender differences determine the results in the high power scenario.

**Proposition 2c (P2c).** Gender differences determine the results in the low power scenario.

In the next section, we present the results and a further discussion of our propositions.

3. Experiment

3.1. Negotiation Task

Our experimental setting, adapted from Gupta [46], is an element of the set of multiple-issue, multiple-option negotiations. The task deals with the annual negotiations between a chocolate manufacturer and a large chocolate retailer. The parties negotiated eight different issues: Price in Euro (paid by the retailer, not the shelf price), advertising refunding, shelf space, shelf maintenance, retroactive conditions, promotions at the point of sale, the listing of products, and access to customer data (e.g., market basket data, purchase history recorded for loyalty programs) for each product. Each issue has four options so that there were at total 48 = 65,636 possible agreements in each negotiation. In contrast to Gupta [46], we did not distribute the issue authority due to the negotiators’ interest. In our case, the issue authority is defined as externally assigned power. Therefore, we have three different scenarios:
3.1.1. Neutral Scenario (N)

Both partners are provided with a balanced power over the negotiated issues. Consequently, the manufacturer and retailer are forced to reach an agreement for all the issues. If they fail to agree on at least one of the set of issues, the agreements for all the other issues become invalid.

3.1.2. Matched Scenario (M)

In the matched scenario, each negotiation party has full authority over “natural resources”. Thus, the retailer can dispose of shelf space, shelf maintenance, the decision of adding or removing products from their assortment and access to customer data. Contrarily, the manufactures can decide on advertising refunding, retroactive conditions, and so on, in this scenario. The negotiators can improve their overall outcome by compensating the counterpart for a concession.

3.1.3. The Mismatched Scenario (MM)

This scenario covers the inverse assignment of authorities. This enables the parties to slip into the counterpart’s role but keeping their priorities. Similar to scenario M, the negotiators have to compensate each other for any concession, but they can choose the opponent’s natural resource which provides them with the highest utility.

The authority assignments of the three scenarios and the parties’ utilities of the issues are the basis for the formal negotiations in our experiment (c.f. Table 1).

<table>
<thead>
<tr>
<th>Issue</th>
<th>Scenario N</th>
<th>Issue Authority Scenario M</th>
<th>Scenario MM</th>
<th>Utility of Option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scenario N</td>
<td>Scenario M</td>
<td>Scenario MM</td>
<td>A</td>
</tr>
<tr>
<td>Prices</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td>Advertising subsidy</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shelf space</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shelf care</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Retroactive payments</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales promotion</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>The listing of new products</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Access to customer data</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

3.2. Negotiation Procedures

The issue authority procedure reduces the complexity of the negotiation task and increases transparency by providing a structure of issues. Following Coleman [47], $C_{ij}$ represents the issue authority of the $i$th party over the $j$th issue. $C_{kj}$ is the issue authority of the $k$th party about the $j$th issue. The issue authorities have to meet $C_{ij} + C_{kj} = 1$ with $0 \leq C_{ij} \leq 1$ and $0 \leq C_{kj} \leq 1$ [46].

We modified the issue authority procedure concerning the allocation of authorities.

3.3. Data Collection

Our data were collected in lectures for marketing students with no prior knowledge of formal negotiation procedures. Previous investigations of negotiation research [48] do not provide evidence for systematic differences in the behavior of the professionals and the students. These authors argue that both proceedings–experimenting with student participants and observing/surveying professional negotiators in field studies–have their value and that different questions need to be pursued with different research proceedings. With respect to the aims of this study, the opportunity of manipulating and controlling the negotiation situation compensates for the common disadvantages of a student sample.

A total of 72 negotiators from three courses completed a negotiation task about chocolates. Due to missing and paradoxical data, the results of three dyads were eliminated.
The participants, aged between 20 and 34, had an average age of 24.52 years. A proportion of 59.09% was female.

The participants were given a role assignment as a standardized introduction to negotiation. Each negotiator was given further information about the role and the products. Then, the negotiation rules and the settings were explained to the participants, which guaranteed the ability to negotiate. Finally, the participants were paired into dyads and allowed to ask further questions.

3.4. Measurement

Within this study, we combine an objective measurement of success within an edgeworth box and a subjective measurement with a form. The participants were asked to fill out a form to bring out their results. They were also asked socio-demographic questions and given a rating-scale about interpersonal characteristics.

Success is measured as the distance between the dyadic negotiation outcome and the next possible Pareto-optimal outcome. The smaller the Euclidian distance to the nearest Pareto-optimal outcome, the more successful is the dyad. Due to the distributive negotiation task, sub-optimal outcomes are anticipated.

4. Results
4.1. Results of the Negotiation Experiments

The results of the negotiation task show that the negotiators were unable to reach efficient outcomes. As expected, the results of scenarios M and MM are close but very inefficient. As expected, dyads in scenario N negotiate most efficiently. To visualize this finding, Figure 1 depicts the results of the “chocolate-task” for all three scenarios:

![Figure 1. Negotiation results for all three scenarios.](image)

4.1.1. Allocation of Issue Authorities and Its Impact on Negotiation Success

To evaluate the impact of the power allocations N, M, and MM (balanced, high, low) on negotiation success, we use the Kruskal-Wallis and Wilcoxon rank-sum tests. Different power allocations have a significant impact on negotiation success ($p < 2.2 \times 10^{-16}$). As expected, the results of scenarios M and MM are very close (mean = 6.45 and 6.73). No significant differences can be found. As proposed, the utility of scenario N with a mean of 9.2 is significantly (N:M: $p = 2.22 \times 10^{-15}$ and N:MM: $p = 4.44 \times 10^{-13}$) higher. This finding is in line with Mannix and Neale [32] and extends their research for retailer-manufacturer negotiations.

Obviously, the research proposition P1 cannot be rejected, especially in scenarios M and MM where the participants were not able to achieve a mutually satisfactory result. From this result, we learn that an increased power in retailer-manufacturer negotiations for one of the two parties implies that the efficiency of the negotiators decreases. Additionally, we learn that the participants are not able to fully understand the structure of this already
simplified negotiation task. Instead of systematically improving mutual utilities and using integrative negotiation strategies, they rely on their power in scenarios M and MM, although this decreases the achieved gains.

4.1.2. The Force of Power and Gender Differences on Negotiation Success

Our second proposition states that the negotiation result is dependent on gender differences. The dependence of the negotiation result due to gender differences is clear ($p < 0.001$) and has been tested in several studies prior to this one. The results in our study are shown in Table 2.

Table 2. Gender differences in negotiation (level of significance = 0.05).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Median</th>
<th>$p$-Value</th>
<th>Diff. between Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>masculine-masculine</td>
<td>9.4</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>feminine-feminine</td>
<td>8.38</td>
<td></td>
<td>masculine-feminine ($p &lt; 0.001$)</td>
</tr>
<tr>
<td>masculine-feminine</td>
<td>9.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario M</td>
<td></td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>masculine-masculine</td>
<td>9.4</td>
<td></td>
<td>feminine-feminine ($p &lt; 0.001$);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>masculine-feminine ($p &lt; 0.001$)</td>
</tr>
<tr>
<td>feminine-feminine</td>
<td>5.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>masculine-feminine</td>
<td>5.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario MM</td>
<td></td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>masculine-masculine</td>
<td>9.08</td>
<td></td>
<td>feminine-feminine ($p &lt; 0.001$);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>masculine-feminine ($p &lt; 0.001$)</td>
</tr>
<tr>
<td>feminine-feminine</td>
<td>5.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>masculine-feminine</td>
<td>6.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In each scenario, masculine dyads achieve consistently high gains and are close to the efficient edge. Feminine dyads realize similar successful results in the balanced scenario. In the scenarios with polarized allocation of power, they turn away from their successful negotiation strategy and reach lower gains. The same behavior is found in the mixed groups. Although they achieve the highest gains (significantly higher than feminine dyads) in the balanced scenario, they negotiate considerable worse in scenarios M and MM.

In scenario N, there are only significant negotiation results between the feminine dyads and the mixed group. Significant differences between the masculine and the other two groups are found in scenarios M and MM with a more extreme allocation of power. Each scenario shows that the negotiation results differ due to gender differences. Our research propositions $P_2$, $P_{2a-c}$ cannot be rejected.

4.2. Discussion

This study provides first evidence on the impact of gender on the use of power in commercial negotiations. Replications and extensions of the experiment might strengthen the empirical support for the evaluation of our hypotheses. The significant differences in the results between the balanced power scenario (N) and the other scenarios (M and MM) show the substantial impact of power allocation on the gains achieved in the negotiations. Our participants ignored the advice of the positive force of exploring options in each scenario.

However, this phenomenon affects the gender groups in the retailer-manufacturer negotiation task differently. Masculine dyads performed consistently well, while the other dyads took the bait of the power and performed worse in the unbalanced power scenarios. Particularly in the low power scenario women act according to their predicted negotiation behavior and perform worse than men e.g., [10,39]. This implies that women do not use their supposed cooperativeness positively to achieve more efficient results.
Women tend to avoid the burden of further bargaining by using their power. Although a rational analysis of the negotiation task would prohibit choosing extremes (to avoid playing “tit for tat” with mean results), women do tend to choose them as they rely on their lower affinity for negotiation [49]. Women used “tit for tat” in unbalanced power scenarios, even if they knew about the negative consequences, because of their higher reciprocity [36,50]. That a change of the “tit for tat” strategy is paired with higher vulnerability [51] was not observed in this study. This contributes to clarifying behavior observed in the mixed dyads.

Interestingly, the gender differences did not become effective in the balanced power scenario. There exist significant differences only between feminine dyads and the mixed dyads. Therefore, the result is in contrast to several prior empirical studies e.g., [10,39] This might occur due to the negotiation task with its formalized negotiation procedure. Women might overcome the negative gender influences and perform as well as men. In this study, it remains open why the influence of the stereotypes could be overcome in the balanced scenario, but has a considerable impact on asymmetric bargaining power allocations. Further research is necessary to clarify this.

5. Conclusions and Summary

Negotiators in annual retailer-manufacturer negotiations are highly educated people who are assumed to be familiar with all the rules and tricks. These negotiations between professionals are said to be difficult, but crucial for business success. This study demonstrates that the assumed advantage of high power does not necessarily lead to success in retailer-manufacturer negotiations. Differences in the power allocation turn out to have a significant impact on negotiation success. In scenarios with substantial differences in bargaining power, female and mixed dyads failed to achieve a mutually satisfactory result whereas men negotiate at a consistently high, but still inefficient level. Gender differences in the reliance on bargaining power are confirmed.

We learn from the experiment that an increase in issue authority for one of both parties does not lead to an increase in negotiation efficiency. Particularly female and mixed dyads were unable to cope with the structure of our already simplified retailer-manufacturer negotiation task. Instead of systematically improving mutual gains, they relied on their power, whereas masculine dyads negotiated on a consistently higher, but still inefficient level. In our experimental setting, cooperation would lead to better results. Contradicting the common stereotype, the women did not proceed more cooperatively than men.

Considering these differences, we argue that power does not compensate for insufficient negotiation skills or efforts. On the contrary, unbalanced power decreases the likelihood of success. Practitioners in commercial negotiations should not attempt to rely on a power advantage to reduce their negotiation efforts. Differences in bargaining power allocation are detrimental to the negotiation results. In the case of unbalanced bargaining power, the formal structuring of the negotiation situation can increase the overall outcome.

The major contribution to theory building is, that females are not per se inferior in negotiations, but their performance decreases in scenarios of power asymmetries. Therefore, this study provides explanatory causation going beyond the context of retailers-manufacturers negotiations. The originality of this study arises from the fact that the results provide experimental evidence supporting the assumption that “an unequal-power relationship incentivizes individuals to focus on gaining and maintaining their control over resources, which should increase the cognitive salience of self-interest” [8]. Indeed, the imbalanced-power participants’ focus on self-interest is leading to inferior results. Embedding these findings in the contemporary scholarly discussion, recent research shows [33], that moral reasoning does not have a moderating impact on power use our results show that gender has a moderating impact, if both parties are female.

Furthermore, the realization of gender differences in negotiations and the effect of different power characteristics on the outcome of negotiations or even avoidance of negotiations are important to be able to overcome the resulting disadvantages for women and
men. While in the past women were said to be less successful in negotiations according to their role model, today it is evident that these differences are no longer observable when power is distributed equally.

**Author Contributions:** All authors (K.Z. and R.W.) contributed equally to the work. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Ethical review and approval were waived for this study, but the regulations of the University of Kassel, the regulations of the federal state of Hessa, the German data protection regulations and the declaration of Helsinki were met.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data are not available online.

**Conflicts of Interest:** The authors declare no conflict of interest.

**References**
