Cognitive Biases in Negotiation - Literature Review

ABSTRACT

Objective: The purpose of this paper is also to thoroughly review those studies in the management literature that focused on bias in negotiation and to ascertain a couple of new research trajectories that could be observed as the result. As a matter of fact, a human’s judgment making capacity and behavior could be greatly influenced by cognitive misperceptions thus affecting decisions in negotiations. Whilst Thompson (2006) analytically examined the effects of biased decision-making processes for negotiations, the intention of this paper is to fill the gap through a systematic assessment of the literature.

Methodology: I have provided a theoretical background on decision makers’ cognition in this paper to provide context and introduce the research; after which we take a closer look at the literature and discuss its results. Based on this, I noted that limited research, with alternate results were done based on the interaction between biases bothering on mood, culture, personality as well as education and experience on the negotiators’ judgments.
Finally, we suggest that future research trajectories might be on multilateral and integrative negotiations, the role of third parties and a better comprehension of the cognitive bias and how to rise above it in negotiations.

Findings: Despite the fact that this topic is considered important, it is surprisingly under-researched. Author was able to identify the void and inadequacies of the literature identified in journal articles systemizing the intersection of negotiation studies, from cognitive biases studies, group decision making and from the decision making and judgment literature.

Value Added: This paper showed that there are only a handful of papers that focus on why, how and when cognitive biases influence negotiation process.

Recommendations: There is a great need for papers that focus on cognitive biases in the negotiation process.

Key words: cognitive biases in negotiation, negotiation process, decision making, cognition

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Introduction

Our perspective on the world and how we process information is greatly influenced by our backgrounds, beliefs and values (Sułkowski, 2012; Sułkowski, 2009). The term cognitive bias is used to describe the difference between the reality of a situation and the way our brain perceives it. When it comes to negotiation, this bias can be particularly problematic because it hinders the negotiating parties from reaching a logical or rational outcome that is mutually beneficial to both parties.

The ability of a person to recognize and understand this bias in negotiations will help reduce the influence the bias can have on such person. The reason is – the person would have adjusted accordingly and thus, a more rational decision would be arrived at. In many cases, negotiating parties don’t reach an agreement beneficial to both parties (Chmielecki, 2013; Chmielecki & Sułkowski, 2017).
When it comes to negotiation, this bias can be particularly problematic because it hinders the negotiating parties from reaching a logical or rational outcome that is mutually beneficial to both parties. The ability of a person to recognize and understand this bias in negotiations will help reduce the influence the bias can have on such person. The reason is – the person would have adjusted accordingly and thus, a more rational decision would be arrived at.

In many cases, negotiating parties don’t reach an agreement beneficial to both parties. A research carried out on negotiation analysis compiled a group of so called common biases in negotiations that methodically influence the reasoning and behavior of negotiators and by extension, influence agreements.

What is the discipline’s existing perception of cognitive biases in the process of negotiation? What can we learn from this body of literature? The focus of cognitive biases in Decision-making studies has majorly been on the decision-making capacity of the individual. However, other parties are involved when it comes to negotiation decisions and in many cases, these different parties will different interests (Fisher & Ury, 1981; Lax & Sebenius, 1987). On an individual basis, decision making is often clouded by cognitive bias and as such, decisions made by the individual is rarely completely rational and this spills into the negotiated decision between several parties. For the sake of this paper, I will refer to rationality as the decision making process that should lead to nothing but the optimal results based on a proper unbiased assessment of the negotiator’s value and risk preferences (Gino, Moore, & Bazerman, 2009, p. 4).

Cognitive biases in the literature

Drawing from the studies on bounded rationality by Herbert Simon, the issue of cognitive biases affecting the decision process has been addressed by its attempt to explain why misinterpretations by humans can occur. According to cognitive studies (Neale & Bazerman, 1985), viewing negotiation processes as a cognitive decision-making task can make the understanding
of cognitive bias better. This way, people can create a mental representation of the conflict situation, the common interest and the stance of the other negotiator(s). This encompasses the influence of the negotiator’s information processing abilities on the judgment of such person and how it affects his/her behavior. Based on this, it is crucial that you identify the wrong assumptions of the opposing negotiators’ cognition during the process of negotiation (Thompson & Hastie, 1990).

Stanovic and West (2000) made a distinction between Systems 1 and 2 within cognitive human functioning: intuitive, effortless implicit, automatic and emotional being the first, while rational, determined, conscious, slower and reflective being the second (Kahneman, 2003). The automatic system feels instinctive and is rapid. On the one hand, the automatic system, or gut feeling, is rapid and is or feels instinctive: we get nervous when the plane shakes because of turbulence or we duck when a ball is thrown at us unexpectedly (Thaler & Sunstein, 2008). There is a level of accuracy in gut feeling however; the reliance on the automatic system would only lead to mistakes.

Rules of thumb can assist in the judgment making process. While they are helpful, they could also serve as a foundation for systematic bias (Tversky & Kahneman, 1974). Heuristics simplify strategies to manage complicated problems and issues. Newell and Simon (1972) state that heuristics are cognitive shortcuts that is usually called on by the human brain when there is a limitation on its decision making process in terms of data availability and time. It could offer correct and partially correct judgments and it is only expected that people will utilize some of them (Gino, Moore, & Bazerman, 2009). Unfortunately, it tends to lead to systematic biases (Tversky & Kahneman, 1974). The bias is the systematic errors made by humans in
specific circumstances, which is based more on cognitive factors than on evidence (Tversky & Kahneman, 1974). These errors are more common in system 1 than in system 2 (Gino, Moore, & Bazerman, 2009).

The literature chiefly presents the following heuristics:

- Biases and errors in correlation with positive and negative moods are brought on by the emotion of the individual. Good moods in particular increase the reliance on heuristics (Alloy & Abramson, 1979; Bodenhausen et al., 1994), while reliance on heuristics and stereotypes is brought on by negative mood (Park & Banaji, 2000).
- The affect heuristics exists on the premise that judgments are evoked by emotional or affective evaluation, which usually takes place before any form of higher-level reasoning is done (Kahneman, 2003).
- The availability heuristic exists when the probability, frequency, or likely causes of an event is examined by the degree to which occurrences of said event are readily available in memory (Tversky & Kahneman, 1974).
- The bounded awareness influences the individual’s information selection process; people often filter information unconsciously in an attempt to avoid information overload. This may lead to a neglect of relevant observable data (Chung et al., 2005).
- The confirmation heuristics is seen when people test hypothesis with selective data such as the instances in which the variable of interest is present (Klayman & Ha, 1987).
- The representativeness heuristic exists when judgment is being made on an event, or an individual, people are likely to be on the lookout for traits that correspond with the already formed stereotypes (Nisbett & Ross, 1980).
- The risk aversion relates to the fact that people treat risks pertaining to perceived gains and risks related to perceived losses differently (Tversky & Kahneman, 1974).

These heuristics can be applied by everyone and is not necessarily restricted to certain individuals as research has shown (Gino, Moore, & Bazerman, 2009; Wickham, 2003). According to Gino, Moore and Bazerman
(2009) common biases could be linked with the “emanating” heuristic as shown in Table I.

Hammond et al. (2001), provided one of the most straightforward interpretations of bias. He proposed the idea of hidden traps in decision making for considering all those situations where the brain deviates from deciding rationally. Basically, the cognitive misperceptions can highly tilt the human behavior to bias when making decisions and this is also present in negotiations (Thompson, 2006).

This section focuses on the discoveries from the literature review, which is properly discussed, and implications and recommendations for future research drawn on the basis of systemized knowledge. Based on the biases noted in the articles, the articles are grouped into 11 clusters based on data set namely; toughness bias, status quo, relationship bias, intergroup bias, self-serving, framing and fixed-pie.

**Fixed-pie and incompatibility error**

Several scholars have conducted several studies in an attempt to understand the fixed-pie error which aims to answer why negotiators constantly regularly fail to reach integrative agreements or a min-min solution for the parties involved (Gino, Moore, & Bazerman, 2009; Lax & Sebenius, 1986). The studies that have been carried out on fixed-pie errors majorly focus on the perception of the negotiators’ perception of the both the negotiation process and the counterpart’s preferences and interests (Gelfand & Christakopoulou, 1999; Thompson & Hastie, 1990). The definition of the fixed-sum (or fixed-pie) judgmental error is: “[...] the tendency to assume that the other party places the same importance – or has the same priorities as the self – on the to-be-negotiated issues when the potential for mutually beneficial trades exists” (Thompson & Hastie, 1990, p. 101). This term, which was coined by Bazerman and Neale, is used to describe a situation where humans underestimate the amount of common ground they share with
others while overestimating the extent of conflict. That’s the major reasons why negotiators tend to think what is good for one party has to be bad for the other. They view negotiation as a fixed pie thus they feel that the bigger the slice they allow the opposition have, the smaller they’ll have for themselves. However, this isn’t always the case but it causes negotiators to avoid critical creative thinking that could result in a win-win result for both parties.

Negotiators can realize there is more common ground than first meets the eye if they recognize this bias and question their assumptions. This way, the negotiator gets a better understanding of the efficient optimal solutions that they would never have otherwise considered.

This implies that the interest of their counterparts might never be truly understood by a negotiator and the idea of judging a person’s interest as being diametrically opposed to theirs (Gelfand & Christakopoulou, 1999). The fixed-pie approach often ends with a faulty decision because (Raiffa, 1982). In interrogative negotiations, Incompatibility error occur when negotiators go ahead to assume that the preference of the other party for alternatives are incompatible with theirs in situations where their preference can actually be perfectly compatible (Thompson & Hastie, 1990, p. 113). Thompson and Hastie (1990) ascertained that this error had nothing to do with the fixed-sum error even if it was predicted to be by the theory and quite a number of negotiators are affected.

Negotiators sometimes show a modest level of interpersonal understanding, which is measured in terms of predictive accuracy about the payoff of the other negotiator. That said, it was observed that an accurate interpersonal understanding was better associated with better payoffs (Mumpower et al., 2004; Thompson & Hastie, 1990). Thus, the fixed-pie bias is flawed and can logically be expected to hinder the success of integrative agreements (Gelfand & Christakopoulou 1999; Mumpower et al., 2004; Thompson & Hastie, 1990). The fixed-pie bias is considered a bias that exists only within the integrative negotiations. As a matter of fact, the fixed-pie perception isn’t a bias in distributive problems; it only
demonstrates the level of understanding of the accuracy of problem structure (Mumpower et al., 2004).

Thompson and Hastie (1990) observed that people go into negotiations with the fixed-pie perspective and end up not realizing that their counterparts have a totally different priority, often opposite to theirs. This is particularly true in the USA because of the prevalent individualistic culture unlike other places like Greece that have a collectivist culture (Gelfand & Christakopoulou, 1999). Remarkably, this suggests that cultural processes might have an influence in bias perpetuation. They start the negotiation with a clear perception of the situation and during negotiation, the dynamics end up making them deviate from this. One common disadvantage of this is that over time, negotiators tend to get overconfident in their negotiating abilities (Gelfand & Christakopoulou, 1999).

The number of parties involved is another variable that could affect the fixed-pie errors. Based on this, Traavik (2011) showed that the fixed-pie bias increases with the number of parties, plus, dyads outperform groups both on economic and subjective measures of outcomes. As a result of the fixed-pie bias in distributive negotiations, 2 related errors emerge: the large-pie bias and the small-slice bias (Larrick & Wu, 2007). The size of the bargaining zone is constantly being underestimated by negotiators; the small-pie bias – and, by insinuation, overrate the share of the excess they claim – the large-slice bias (Larrick & Wu, 2007).

**Framing**

Do you see the glass half full or half empty? Well, the answer to this might not be entirely up to you. Your perception can be significantly influenced by the context in which the situation is presented. You could be more risk tolerant if you are interested and this is dependent on the impact of your impression on the opportunity. You will most likely be more interested if the situation is presented in a positive manner. It is up to you to ensure you are
not avoiding risk or attracting them unnecessarily just because of how it was presented to you. You also have to ensure that you focus more on the quality of the deal and not just the quality of the presentation. A good way to check this is to present this to a friend or a league and see how good the deal still sounds.

The framing effect materializes as the beginning point of the cognitive bias in negotiation studies. Based on this, people’s perception and reaction to a situation depends on how it is presented to them. Specifically, the prospects of losses are treated differently from that of gains and this directly influences their risk propensity (Kahneman & Tversky, 1979). Several published literature have analyzed how negotiator behavior is influenced by the impact of framing, the impact of framing influence on negotiation outcome (Bazerman et al., 1985; Neale & Bazerman, 1985), and the effects of framing on perceptions of fairness. A completely different outcome could be predicted just by changing the frame of the situation. According to Neale and Bazerman (1985), risk aversion dominates when positive frames exist and thus, the negotiated settlement is predicted. More studies (Bazerman et al., 1985) observed that significantly more transactions were completed by positively framed negotiators than the negatively framed ones; consistent with the Kahneman and Tversky (1979) prospect theory. On this basis, it looks like the negotiators become risk takers when they consider the potential outcome in a negative frame i.e. what do they have to lose, while if the evaluate potential results on the basis of what they could gain i.e. positive frame, they become risk averse and this enhances the chances of successfully having a complete negotiated settlement. Bargainers who are positively framed are more likely to be cooperative than their negatively framed counterparts (Bazerman et al., 1985; Neale & Bazerman, 1985; Neale et al., 1987).

Neale et al. (1987) observed that the obligations, rights and expectations that are associated with the negotiation role significantly influence the participants’ social interaction. Also, Bottom and Studt (1993), tried to offer a detailed explanation of the role of framing and went on to analyze
it in terms of integrative and distributive aspects of bargaining. Framing and risk attitudes influence a negotiator’s approach to dealing with the dilemma of creating value and claiming value (Lax & Sebenius, 1987). On in the distributive situations, the negatively framed negotiators are more likely to better than their positively framed counterparts and they tend to be more affected by self-serving bias. Even at that, the positively framed negotiators tend to reach more integrative settlements than their negatively framed counterparts (Bottom & Studt, 1993). A negotiator that seeks risk ought to be willing to use tactics that threaten both bargainers with the disagreement outcome, also known as “claiming tactics” (Lax & Sebenius, 1986). The fact that risk-averse negotiators would want to avoid disagreements, they ought to be unlikely to engage in these risky tactics and are likely prone to fall for those negotiators that do.

**Emotional bias and overconfidence**

Not much has been done to understand the influence of emotion in the negotiation process and very few studies have combined emotional bias with the negotiator’s overconfidence. Overconfidence is a bias that stems from confirmation heuristics which results in people tending to have a certain belief in themselves and overconfident in the infallibility of their judgments (Gino, Moore, & Bazerman, 2009; Kramer et al., 1993; Neale & Bazerman, 1985). This hinders success in reaching agreements and reduces concessionary behavior (Neale & Bazerman, 1985, p. 37).

Basically, this focuses on the tendency for negotiators and humans generally to overestimate their own abilities, success chances and control over external forces. This is a very important perception because it plays a major role as to how disputes arise in the first place and in most cases; it explains why the parties involved would rather litigate than settle.

It has been proven in different studies that this bias actually is a major thing. A perfect example was when the University of Texas law students were pro-
vided with identical facts and were arbitrarily assigned to either the defendant or the plaintiff in a mock personal injury case. The plaintiff wanted $100,000.

When they were asked to predict what the judge would award based on the facts, the students representing the plaintiff averagely predicted that it would $14,527 more than the students who represented the defendant. Obviously, both parties cannot be right. The only obvious distinguishing factor was that they were on different sides.

Overconfidence often creates a barrier to negotiation because it reduces the chances of a possible agreement. When both parties are overconfident of their chances, the willingness to settle on the part of both parties would be diminished and for this reason, it is very likely that both parties would walk away from an otherwise reasonable offer.

The ability to recognize this bias and take it into consideration when negotiating enables negotiators to make a more accurate assessment of their strengths in relation to that of their counterparts. It also enhances the chances of agreeing to a settlement that offers better value that the alternative.

Emotional bias is that bias that has to do with the emotional mood or state that a person is in when he/she has a decision to make. On the average, a person in a good mood would likely have an increased heuristics and results in more biased judgments (Gino, Moore, & Bazerman, 2009). Kumar and Gladwin (1987), presented a likely model of crisis negotiation, noting that the perception of crisis induces a strong negative affects with a bargaining unit and cognition is biased and restricted by this affects by an enhanced reliance on heuristics. Kramer et al. (1993) would later demonstrate this in an experimental study. They observed that the confidence of a negotiator was influence by mood and that a positive mood contributed to the overconfidence of a negotiator. Basically, positive moods enhance integrative behavior (Kramer et al., 1993).
Self-serving and anchoring

Self-serving bias in the literature is described as a judgment error that influences the individual perception of a situation in a self-serving manner. Based on the psychological studies documenting systematic biases in a person’s judgments of fairness, scholars contemplate that predictions of judicial decisions will be systematically biased in a manner that benefits the position of an individual. Specifically, this bias has been analyzed in regards to distributive negotiations (Gelfand et al., 2002; Thompson & Loewenstein, 1992). Self-serving has mostly been seen as a predictive cause of impasse during negotiations; people often reject the offers of their counterparts because of this bias; they almost always see whatever offer they get as unfair (Gelfand et al., 2002; Thompson & Loewenstein, 1992). This is common in places like the United States because of the individualistic culture (Gelfand et al., 2002). Drawing on the study of egocentric judgments of fairness by Messick and Sentis’ (1979), Thompson and Loewenstein (1992) noted that the egocentric bias in negotiation might arise as a result of biased encoding of information, selective recall or differential weighting of information. Basically, despite the fact that negotiators were offered identical facts, they only remember that which favors their course and thus, the arrival at different conclusion about what would constitute a fair settlement in the end (Gelfand et al., 2002; Thompson & Loewenstein, 1992).

When people make estimates for values, the anchoring effect gets associated with the decision-making process.

When it comes to valuations, the first piece of information offered in a conversation can be particularly impactful on the negotiation. Many negotiators make use of this initial bit of information as the reference point or anchor for the whole discussion or negotiation. For instance, if a banker states that a specific kind of company values at 1.5x – 2.5x, the entire discussion would be referenced or pegged to those figures. In order to reduce the influence of the anchor, or avoid it completely, you may have to run your own research.
before having that first meeting and when doing this, try to consider every bit of information equally. Endeavor not to anchor the value of a company you intend to sell higher than the actual market will allow.

The quality of a person’s judgment could be at significant risk if such a person anchors on unreliable information; even when objectively appropriate anchors are available, the recency affects triumphs (Whyte & Sebenius, 1997). Furthermore, similar anchoring effects have been observed in students as well as experienced managers (Whyte & Sebenius, 1997). The effects on negotiations have been examined through buyer-seller simulated experiments where the negotiators negotiate price agreements (Kristensen & Garling, 2000; Ritov, 1996; Whyte & Sebenius, 1997). The so-called competitive market simulation (Bazerman et al., 1985) has been used majorly to examine the anchoring effects in negotiation. Studies have shown that there is link between the anchoring effects and the schedule of payoff given to participants is framed (Ritov, 1996). Anchoring could be seen in negotiations in different forms for instance, the initial position, bottom lines or aspirations of a negotiator (Ritov, 1996; Sebenius & Whyte, 1997). Profits are influenced by the initial offers serving as anchors for both parties during negotiation. This has been properly demonstrated in a controlled experiment (Ritov, 1996) and in actual negotiations. Despite the fact that the reservation price shouldn’t be affected by the anchor price, results supports that subjects anchor their reservation price on unreliable information (Kristensen & Garling, 2000).

Hindsight and outcome bias

**Hindsight Bias**: Hindsight is eternally 20/20. However, beware this old adage for there is an inherent risk of skewing the invaluable lessons offered by past failures or success. Hindsight bias, which basically is the tendency to assume that an outcome is more predictable than it actually is. By keeping a proper log of the deal process as it is happening, you counteract the hindsight bias and always remember the various factors that influenced every stage of the deal.
**Outcome Bias**: Similar to the hindsight bias, the outcome bias is the tendency of an individual to remember an event only on the basis of the outcome. Simply put, does the end justify the means? Placing the entire focus of a deal on the result can give room for the manifestation of bad deal practices and techniques. Nothing guarantees that something will work just because it once worked. The only way to ensure that you attain success is to focus on the practices that brought about the initial success.

**Intergroup bias, relationship bias, status quo and toughness bias**

In recent years, an evolution in studies has led to the discovery of new biases that influence the negotiation process like the intergroup and relationship bias. Lewis (2011) analyzed the intergroup bias and in this study, it was observed that group members expectation of group members are unrealistically inflated while a more realistic evaluation is done on other groups. This could have an effect on the selection process of the counterpart, which is what is referred to as the relationship bias, and it was discovered by Reb (2010). As preparations for negotiations also include the searching and selection for potential counterparts with whom to negotiate, an influence in this procedure by situational factors of past negotiations experience materializes.

Status quo bias places little focus on the respective articles studied. Evidence from Korobkin’s (1998) people who negotiate contracts have a preference for inactions which exist in instances of legal default and standard contract forms that will guide absent action, thus implying a biased judgment against other solutions Finally, Heifetz and Segev (2004), in a theoretical study, were able to get support for the toughness bias which could be described as similar to the endowment effect that can be seen in the behavior of a seller. In a situation where a buyer has the toughness bias, he/she would believe that the object is worth less to him or her than the actual objective worth to such person (Heifetz & Segev, 2004).
Confirmation Bias

Confirmation bias refers to the tendency to support information that reiterates what you already know or what you thought you know and in situations like due diligence, this could be a problem. This bias makes individuals selectively seek out information that supports your initial notion. You will likely seek out evidence to support it if you think the opportunity is strong. For this reason, your due diligence could be weak, incomplete or skewed. Getting people to handle this for you is a perfect way to go.

Interactions between biases

Drawing from the interactions mentioned above, it is possible to hypothesize associations between anchoring and self-serving. As a matter of fact, high levels of self-serving biases ought to have an impact on the anchoring selection in a manner that favors the negotiator’s position. Likewise, a high level of overconfidence ought to enhance the reliability on information that favors one’s self. The concept needs to be studied further especially in the areas of how the biases interact with each other. Also, a non-studied bias in negotiation context like confirmation trap should be related with self-serving, fixed-pie and overconfidence. In fact, the confirmation trap is associated with information selection, and people incline towards information confirming their initial notion on a situation (Gino, Moore, & Bazerman, 2009). This bias ought to be researched on in terms of negotiation as well as the studies mentioned above.

Future research on under-researched biases

Similar issues affect other biases that ought to be studied in negotiation context too. They include focalism (Gino, Moore, & Bazerman, 2009), which is yet to be studied and status quo, which hasn’t been studied enough.
Focalism ought to have similar impact with the anchoring on negotiations. Focalism affects concepts while anchors affect numbers. Considering that certain interest are in the mind of a negotiator when he/she enters a negotiation, focalism on those issues may affect those issues particularly with negotiations that have to do with concepts more than they have to do with numbers. i.e. price – as main issues. Let’s assume the negotiation is for a Chrysler’s bailout in 2009 where the parties negotiating hit an impasse and the negotiation could have failed. However, they solved the debt issue by moving away from the main topic and started talking into account broader interests and externalities (Caputo, 2013). For instance, the strategic alliances or international laws involving companies are a great in negotiations because the concepts lead over numbers.

Implications and conclusions

The decision-making literature addressed cognitive bias to a great extent. It has been implied by prevalent literature that people are not always rational and they succumb to cognitive and emotional limitations (Cyert & March, 1963). Cognitive misperceptions arise majorly from the systematic biased judgment that comes from heuristics that tend to simplify complex issues to make them easier to cope with (Newell & Simon, 1972; Tversky & Kahneman, 1974). This study showed only handful of papers that focused on why, how and when cognitive biases influence negotiation process. In almost every aspect of our lives, we negotiate and as established, there is a strong link between the negotiation process and the interdependence that reign over them, thus the outcomes of negotiations are influenced by the decisions of all bounded rational parties involved. Basically, the human capacity to make decisions or judgments or negotiate is highly biased by cognitive misperceptions.

The human mind is amazing, however, there are certain limitations to its function. Having a clear understanding of this limitations and cognitive biases can help a negotiator act more rationally and achieve greater value overall.
The aforementioned examples are just a few applications of the cognitive bias – there are a lot more. Both theorists and negotiators have developed a range of techniques to help them overcome these biases or even use them as a tool for tactical advantage over their counterparts.
References


