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**Framing, Endowment Cues, and
Perceived Manipulation in Digital Negotiation:
Evidence from a Multi-Issue Experiment**

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Just because something is not perfect... does not make it any less worthy of love.

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Abstract

This thesis investigates how linguistic framing (gain versus loss) and endowment cues influence negotiation outcomes within digital and multi-issue settings. In particular, the present study adopts a multidimensional conception of negotiation outcomes in order to offer a more complete and nuanced understanding of the value created in negotiation. Therefore, this thesis analyzes both objective outcomes (agreement, integrative agreement, joint value), indicating negotiators' economic performance, and subjective outcomes (satisfaction and perceived manipulation), reflecting the psychological and ethical dimension of negotiation. More specifically, this study focuses on integrative negotiation, where multi-issue settings allow for value creation through trade-offs based on parties' different priorities (Lax & Sebenius, 1986). As regards methodology, the present thesis adopts a quantitative research approach, so primary data were collected through an experimental design implemented in Qualtrics as an online survey. It consists of two simulated negotiation tasks, one for testing the linguistic framing and one for exploring the effect of an endowment cue. In both tasks, participants were exposed to slight linguistic variations in the negotiation proposal according to the treatment they were randomly assigned to. In order to allow causal testing, the underlying economic structure and the payoff tables were held constant across conditions. By blending decision-making and negotiation studies, this thesis contributes to existing literature particularly by showing significant evidence related to perceived manipulation. In fact, the results show that loss-framed communication significantly increased perceived manipulation compared to gain-framed communication, while no significant effects emerged for agreement, integrative agreement, joint value, or satisfaction. These findings offer practical insights for managers by showing that loss-framed communication may carry ethical and relational costs in digital negotiations, even when it does not improve economic outcomes.

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Chapter 1 – Introduction

1.1 Context

Conflict represents an intrinsic component of human life, as it is directly linked to the way the human mind processes information: through independent reasoning shaped by distinct ideas, desires and needs (Aryal, 2025). In human and social interactions, conflict arises whenever two or more different positions show conflicting interests over a specific issue (Moreira-Choez et al., 2021). Thus, conflict is a critical component of social dynamics, often rooted in power dynamics and resource control (Aryal, 2025).

The U.S. President John F. Kennedy once said: “Let us never negotiate out of fear, but let us never fear to negotiate”, highlighting the importance of negotiation as a path towards harmony, preventing avoidance of confrontation (Aryal, 2025). In fact, negotiation moderates and shapes the process of reaching a satisfactory agreement through communication and dialogue (Moreira-Choez et al., 2021). In this way, the parties define the terms of their interdependence (Cutcher-Gershenfeld & Kochan, 2015) and turn conflict into an exercise of collaboration (Moreira-Choez et al., 2021). Thus, despite being usually perceived as negative, conflict plays a positive role to the extent that it “stimulates critical thinking and innovation”, making people change, adapt and evolve (Aryal, 2025).

In fact, integrative negotiation is characterized by cooperation, active listening and information sharing with the aim of expanding the pie to create value and thus generating high joint gains through the identification of trade-offs based on different parties’ interests (Sebenius, 2015; Elgoibar et al., 2021; Lax & Sebenius, 1986). By contrast, distributive negotiation assumes a fixed-pie of resources where one side’s gains correspond to the other’s losses, leading parties to adopt a more competitive and contending behavioral style with the goal of claiming the largest share of value (Sebenius, 2015; Elgoibar et al., 2021).

Decision-making theory has been shown to play a critical role in negotiation research since negotiation involves not only communication but also evaluation of information (Neale & Bazerman, 1992; Rhode et al., 2014): negotiators do not always behave rationally, so they are systematically affected by cognitive biases and deviations from rationality (Tversky & Kahneman, 1981; Tversky & Kahneman, 1974). As a consequence, negotiation research has explored communication strategies

grounded in psychological influence (Neale & Bazerman, 1992; Rhode et al., 2014). Particularly, this thesis investigates the role played by the framing effect and by the endowment effect within these communication strategies.

On one hand, the framing effect refers to the human tendency to react differently to gain-framed or loss-framed information, showing a more extreme reaction to the latter and thus leading to an irrational evaluation of outcomes (Tversky & Kahneman, 1981; Tversky & Kahneman, 1974; Kahneman & Tversky, 1979). Previous literature has shown that gain-framed negotiators tend to be more cooperative compared to loss-framed ones, increasing the likelihood of reaching an agreement, while loss-framed negotiators tend to be more competitive, lowering the chances of settlement (De Dreu et al., 1994; Bottom & Studt, 1993). Nevertheless, empirical evidence linking this mechanism to integrative bargains - for example showing whether and to what extent gain-framed communication increases the likelihood of reaching an integrative solution - remains limited.

On the other hand, the endowment effect indicates the tendency of individuals to value the goods included in the personal endowment more highly than identical goods not held in the endowment (Reb & Connolly, 2007). It operates by changing the reference point and activating a psychological ownership link that increases loss aversion (Reb & Connolly, 2007; Morewedge & Giblin, 2015). However, prior literature has not largely explored the consequences of embedding endowment cues into communication strategies, leaving this area of negotiation research mainly unexplored.

In addition, previous negotiation studies highlight the relevance of psychological negotiation outcomes, since they reflect the subjective value in negotiation (Curhan et al., 2006). Thus, this thesis analyses negotiator's satisfaction, defined in the four-factor model of subjective value of Curhan et al. (2006), in order to complement the analysis of economic results and to offer a more nuanced understanding of negotiation outcomes. In fact, prior literature does not provide direct and specific empirical findings regarding how linguistic framing and endowment cues influence the subjective value of negotiation, particularly the outcome "satisfaction".

Furthermore, following the path of subjective value, the present study investigates the ethical dimension of negotiation by analysing perceived manipulation. Perceived manipulation indicates the extent to which negotiators felt

unduly influenced in their decisions and/or preferences by the other party's communication strategy (Wölfl et al., 2023), and its relevance lies not only in potential reputational damage but also in its implications for willingness to negotiate in the future (Malutan, 2025). The investigation of the framing and endowment effects on perceived manipulation emerges as a growing and partially unexplored research trend, particularly adopting the approach of behavioral ethics instead of discussing it only in abstract or normative terms.

Lastly, the present study acknowledges the increasing importance of digital negotiation, namely negotiation that takes place through mediated channels (Stuhlmacher & Citera, 2005), as it represents a structural shift affecting relational dynamics, information processing and behavioral outcomes (Kozina, 2022). Being a contemporary phenomenon, the related literature is far from being fully developed. Specifically, understanding how psychological and linguistic mechanisms - such as the framing effect and the endowment effect - influence negotiation outcomes may be particularly relevant in digital settings, where communication is likely to rely more on linguistic patterns due to the limited non-verbal cues.

Nevertheless, existing literature has studied these psychological and negotiation-related mechanisms primarily in isolation, leaving the following gaps in the literature: the effect of linguistic framing on the likelihood of reaching an integrative agreement, the effect of linguistic framing on subjective value, the effect of linguistic framing on perceived manipulation, the effect of endowment cues on negotiation outcomes, the effect of endowment cues on perceived manipulation.

1.2 Motivation, Contribution & Research Aim

Given this contextual background, the motivation of this study is to integrate decision-making studies with negotiation studies, in order to provide empirical evidence where it remains limited and to investigate areas of literature that remain unexplored.

First, the present study focuses on multi-issue negotiation settings due to their integrative potential, which allows the creation of value through trade-offs based on different parties' priorities (Elgoibar et al., 2021), so linguistic variations in negotiation proposals may be more relevant in influencing negotiators' decision-making.

On one hand, the study contributes to the existing literature on the framing effect by expanding existing findings to a multidimensional conception of negotiation outcome, analysing how it influences not only the likelihood of reaching an integrative agreement and the related value creation but also negotiator's feelings of satisfaction and the perception of manipulation.

Hence, this thesis incorporates the analysis of satisfaction, recognized as a critical element of subjective value (Curhan et al., 2006), and of perceived manipulation, capturing the ethical perception of negotiation.

On the other hand, it analyzes the role of the endowment effect in the negotiation field investigating how embedding an endowment cue in the negotiation proposal influences negotiation outcomes, addressing a present gap as prior literature has mainly focused on its psychological characteristics rather than on its implications in interactive contexts such as negotiation.

Finally, the study adopts the perspective of Negotiation 4.0 by focusing on digital negotiation settings, a growing shift in today's world that remains partially unexplored as regards psychological communication strategies and their influence on negotiation outcomes.

Differently from prior studies, this thesis integrates value creation, decision-making mechanisms, communication strategies, subjective value and ethics: by jointly analyzing economic and psychological outcomes, this study contributes to negotiation and decision-making research by providing causal evidence on efficiency, subjective value and ethical perception of employing the framing and the endowment effects in multi-issue and digital negotiation scenarios.

Hence, the research aim is to investigate how linguistic framing and endowment cues influence negotiation outcomes in digital and multi-issue negotiation settings, focusing on both objective outcomes (agreement, integrative agreement, joint value) and subjective outcomes (negotiator's satisfaction and perceived manipulation).

1.3 Research Questions & Objectives

More specifically, in order to achieve the research aim, this thesis pursues the following research objectives, which are directly linked to the thesis hypotheses (see chapter 3 section 3.3):

1. To examine whether gain-framed communication increases the likelihood of reaching integrative agreements in digital negotiation settings.
2. To examine whether gain-framed communication leads to higher levels of satisfaction in digital negotiation settings.
3. To examine whether loss-framed communication increases perceived manipulation compared to gain-framed communication in digital negotiation settings.
4. To explore the effect of embedding an endowment cue in the negotiation proposal on integrative agreement and on negotiator's satisfaction in digital negotiation settings.
5. To investigate how the endowment cue influences perceived manipulation in digital negotiation settings.

The related research questions are:

1. Does gain-framed communication increase the likelihood of reaching an integrative agreement in digital negotiation settings?
2. Does gain-framed communication lead to higher levels of satisfaction in digital negotiation settings?
3. Does loss-framed communication increase perceived manipulation compared to gain-framed communication in digital negotiation settings?
4. What is the effect of embedding an endowment cue in the negotiation proposal on integrative agreement and on negotiator's satisfaction in digital negotiation settings?
5. How does the endowment cue influence perceived manipulation in digital negotiation settings?

1.4 Methodology & Roadmap

This thesis adopts a quantitative approach: it employs an experimental design consisting of two negotiation tasks implemented through Qualtrics, the first one for investigating the framing effect and the second one for exploring an endowment cue grounded in the endowment effect. Both tasks were completed by participants within a single survey, including a clear transition message to highlight the separation between tasks. They both involve a simulated negotiation scenario, where the

manipulation of the treatment - gain versus loss frame in task 1 and endowment cue versus neutral wording in task 2 - allows for the identification of causal effects.

The present study is structured as follows. Chapter 2 represents the theoretical foundations, since it defines negotiation basics and negotiation outcomes, while highlighting the most relevant findings of decision-making theory fueling the hypotheses. Chapter 3 first explains the relevance of digital negotiation and behavioral ethics, then defines the hypotheses and the conceptual model guiding the thesis. Chapter 4 presents the methodology and the experimental research design. Chapter 5 reports the empirical findings while Chapter 6 discusses and interprets these results, highlighting their theoretical and managerial implications. Lastly, it acknowledges the limitations of the study, indicates directions for future research, and concludes the thesis.

Overall, this thesis aims to shed light on how slight linguistic variations in communication - grounded in framing and endowment mechanisms - shape the value created in digital and multi-issue negotiations, considering not only economic value, but also psychological and ethical value.

Chapter 2 – Theoretical Background: Negotiation and Behavioral Decision-Making

2.1 Negotiation Basics

Neale & Bazerman (1992) defined negotiation as a “decision-making process among interdependent parties who do not share identical preferences” through which “the parties decide what each will give and take in their relationship” (Neale & Bazerman, 1992). Furthermore, as explained by Elgoibar et al. (2021), two subprocesses can be distinguished in negotiation: distributive and integrative.

Distributive negotiation is regarded as “win-lose process”, similar to a zero-sum game (Elgoibar et al., 2021). It is positional, individualistic, competitive and contending (Sebenius, 2015). Parties assume a fixed pie or a fixed amount of limited resources that they have to split between them, so they try to claim the largest share of value (Elgoibar et al., 2021).

Integrative negotiation consists of a “variable-sum” or “win-win agreement” allowed by the fact that the parties could have different interests in which they discover and create joint gains (Elgoibar et al., 2021). Thus, it refers to an interest-based, joint gains-focused, cooperative and collaborative behavioral style, which aims to “expand the pie” (Sebenius, 2015). Problem solving and creative thinking are employed to come up with innovative solutions and valuable trade-offs, as parties seek the best solution for each other rather than a personal victory (Moreira-Choez et al., 2021). However, an integrative agreement is not the same thing as a compromise, as the management theorist Mary Parker Follett explained: “The conflict in this case was constructive. And this was because, instead of compromising, they sought a way of integrating [...]” (Follett, 1942, p. 128 in Cutcher-Gershenfeld & Kochan, 2015). Particularly, Lax & Sebenius (1986) explain that the negotiators’ failure is often due to the adoption of the fixed-pie approach, while negotiation success is measured by the “ability to discover complementary interests”, which leads to the creation of joint value and generating integrative opportunities (Lax & Sebenius, 1986).

The main implication for this thesis is the focus on integrative settings, since they open up opportunities for value creation where communication strategies grounded in psychological deviations from rationality, such as the framing effect, may play a more relevant role. Particularly, multi-issue scenarios possess integrative potential whenever parties have different interests and priorities at stake (Elgoibar et

al., 2021). Therefore, slight linguistic variations may enhance or hinder such potential, influencing negotiators' cooperative attitudes and thus negotiation outcomes, and this is the starting point from which this thesis develops its investigation.

2.2 Negotiation Outcomes

In this study, the measurable results of the experimental negotiation tasks are defined operationally as the negotiation outcomes. Particularly, the thesis analyzes both objective and subjective outcomes: agreement versus impasse, integrative terms of the agreement, joint value (objective outcomes), satisfaction and perceived manipulation (subjective outcomes).

The distinction between objective and subjective outcomes recalls the review of research in negotiation of Thompson (1990), in which she proposed two classes of outcomes: economic outcomes, referring to “explicit terms or products of the negotiation”, for example “whether an agreement has been reached, how much value or joint benefit has been created, and how resources are divided [...]” (Curhan et al., 2006) and social psychological outcomes, whose metrics are “grounded in social perceptions” (Curhan et al., 2006).

Starting with the description of economic outcomes, agreement versus impasse does not simply refer to whether an agreement is reached or not, as the definition of impasse is more complex¹, but - rather than deepening the investigation of the “impasse” - this study focuses on the outcome “agreement” since it is the baseline for the other primary outcome (integrative agreement).

Connected to agreement, other objective negotiation outcomes are concessions and terms. A concession is defined as “a change of offer in the supposed direction of the other party's interests that reduces the level of benefit” (Tey et al., 2021), indicating what each party gives up to come to an agreement, while terms indicate the allocation of value among parties (Neale & Bazerman, 1985).

This thesis analyses not only the likelihood of settling but also the likelihood of reaching an integrative agreement while settling. More specifically, previous literature indicates that “a solution in negotiation is said to be integrative to the extent that it reconciles the parties' divergent interests and provides them with high

¹ It is a “negotiation in which one or two parties discontinue the interaction, either because one or both parties prefer no agreement, or because they could not reach an agreement despite them benefiting from doing so” (Schweinsberg et al., 2022).

joint benefit” (Carnevale & Isen, 1986), where joint benefits refer to “the collective gain of the parties in the final agreement” (Carnevale & Isen, 1986). Furthermore, the terms of this integrative agreement are supposed to indicate an allocation of value that reflects the best solution for both parties rather than a personal victory (Moreira-Choez et al., 2021). This is coherent with the fact that integrative negotiation is aimed at “expanding the pie” (Sebenius, 2015). Consistent with these findings, the present study considers as integrative agreement an agreement exceeding a predefined threshold of joint value, for operational purposes within the experimental design (see chapter 4 section 4.5.3).

In prior literature joint value is defined as the outcome created “when parties trade off issues that are of low cost to one side but high benefit to the other” (Lax & Sebenius, 1986), referring to the parties’ different interests and priorities in multi-issue scenarios. The measurement of joint value, calculated as the sum of the payoffs associated with the option chosen by parties, is allowed by the multi-issue negotiation scenario and the asymmetric payoff structure. Joint value is used as an observable and measurable proxy of negotiators’ cooperative attitude, which cannot be measured directly.

Therefore, integrative agreement is a hierarchical outcome as it is operationalized through a two-step measure that reflects first the likelihood and then the quality of agreement, with agreement vs impasse as an extensive-margin variable and integrative agreement as an intensive-margin variable (see chapter 4 section 4.6.1).

Moving on to psychological outcomes, Curhan et al. (2006) expanded Thompson’s (1990) framework by developing the four-factor model of subjective value, which includes negotiator’s satisfaction in the category “feelings about instrumental outcomes” (Curhan et al., 2006). More specifically, it is defined as “a negotiator’s feelings about the final terms of the settlement” and it represents a critical element of subjective value (Curhan et al., 2006).

In addition, perceived manipulation reflects individuals’ feelings of being unduly influenced in their preferences and decisions by the counterparty’s communication strategies (Wölfl et al., 2023). In this thesis, it is operationalized as a construct built on subjective perceptions using the behavioral ethics approach, as explained in the following chapter at section 3.2.

Negotiator's satisfaction and perceived manipulation are measured using three items each on a 5-point Likert scale, capturing respectively the extent to which negotiators are satisfied with the agreement reached and the extent to which they felt unduly influenced by the counterparty in their preferences and/or decisions. Hence, they both represent psychological measures of the negotiator's evaluations and feelings and are thus operationalized as subjective outcomes.

The importance of these psychological outcomes lies in their impact on sustainable relationships since, as previous literature highlights, subjective value influences the willingness to negotiate again in the future with one's counterparty (Curhan et al., 2006) and, particularly, perceived manipulation impacts reputation and public image (Malutan, 2025). In fact, individuals who are victims of manipulation tend to generalize the unethical behavior of the counterpart as indicative of the whole character, supporting the fact that "any deviation from ethical principles in negotiations risks causing irreparable damage to relationships and public image" (Malutan, 2025).

Therefore, the dependent variables investigated in this thesis are: agreement, integrative agreement, joint value, negotiator's satisfaction and perceived manipulation.

Thus, the implication for this study is the adoption of a multidimensional conception of negotiation outcomes, considering objective and subjective outcomes within the experimental design, in order to simulate a realistic world-like scenario and to provide a nuanced understanding of negotiation outcomes.

2.3 Decision Making Theory

2.3.1 The Framing Effect

Negotiation researchers have long focused on the underlying psychological mechanisms shaping decision-making and behavioral patterns in negotiation (Neale and Bazerman, 1992). The use of language is closely related to these mechanisms and patterns, as it represents the main tool negotiators have to enhance or destroy trust, cooperation and collaboration, modeling the integrative potential of the negotiation itself and influencing negotiation outcomes (Siagian et al., 2024). This use of language is employed in the framing effect.

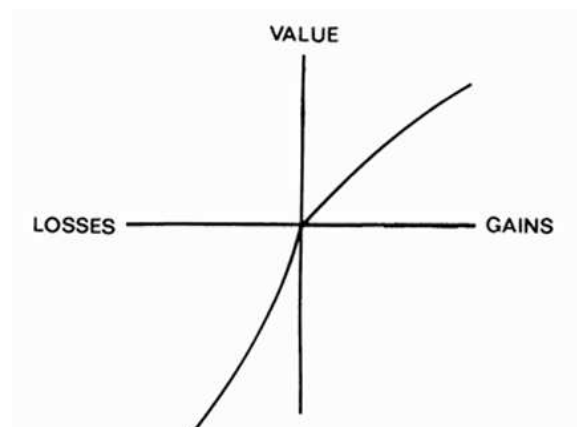
The framing effect refers to the human tendency to be influenced by the different phrasing of information - in terms of its positive or negative aspects - when

making decisions or, more specifically, when evaluating outcomes as gains or losses, meaning positive or negative deviations from a neutral reference point, commonly zero (Tversky & Kahneman, 1981; Kahneman & Tversky, 1979).

In practice, when individuals are presented with information in negative terms they react in a more extreme way compared to when the same piece of information is presented to them in positive terms, because people experience a more extreme reaction to losses than to equivalent gains (Tversky & Kahneman, 1974; Kahneman & Tversky, 1979).

This behavioral pattern is explained by the core pillar of the Prospect Theory “losses loom larger than gains”, which means that the pain in losing something - such as a sum of money - is greater than the pleasure in winning the same amount of the same item - like the equivalent sum of money - (Kahneman & Tversky, 1979). It is a consequence of the value function (figure 2.1) conceptualized by Tversky & Kahneman, which is “concave for gains, convex for losses and steeper for losses than for gains” (Kahneman & Tversky, 1979). In the negotiation field, it is translated as loss aversion.

Figure 2.1 - Value Curve



This value curve represents graphically the value function proposed by the Prospect Theory of Kahneman & Tversky (1979).

Therefore, framing operates as a decision-making mechanism since it activates a reference point and determines the evaluation of outcomes as gains or losses based on this reference point (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981).

As regards the negotiation field, framing influences the extent to which negotiators make concessions and demands: loss-framed negotiators react more extremely to the information presented, thus becoming more conservative, cautious and defensive, which in turn leads them to demand more and to make fewer concessions (De Dreu et al., 1994). By contrast, when outcomes are evaluated as gains, negotiators do not have this extreme reaction. Hence, they are more prone to perceive the negotiation process as an opportunity to reach an agreement, being more willing to make concessions and demand less in order to settle (De Dreu et al., 1994).

As a consequence of this mechanism, gain-framed negotiators show more cooperative attitudes, enhancing the likelihood to settle (De Dreu et al., 1994): general findings from previous studies indicate that gain-framed negotiators “are cooperative, more likely to settle, achieve greater profits and greater joint benefits” compared to loss-framed negotiators (Bottom & Studt, 1993). In fact, empirical evidence shows that individuals negotiating net profit (gain frame) make larger concessions and are more likely to reach an agreement compared to people negotiating expenses (loss frame), being the latter more focused on protecting their position rather than settling (De Dreu et al., 1994).

Furthermore, as cooperative attitudes are associated with integrative negotiation (Sebenius, 2015), which in turn is associated with higher joint benefits (Carnevale & Isen, 1986), evaluating outcomes as gains is predicted to generate higher value negotiation outcomes, both economic and psychological ones. In fact, cooperative attitude in sharing information is needed to understand the different priorities regarding the issues involved and to reach integrative solutions (Bottom & Studt, 1993).

This view is supported by the frame adoption hypothesis, according to which negotiators tend to adopt the frame communicated by their opponent (De Dreu et al., 1994). Loss-framed communication leads both gain-framed and loss-framed negotiators to adopt loss-framed language, thus being competitive in their offers (De Dreu et al., 1994). By contrast, gain-framed communication leads gain-framed negotiators to make cooperative offers (De Dreu et al., 1994). Hence, communicating a loss frame makes the other party evaluate outcomes as losses too, decreasing willingness to make concessions, cooperative attitude, and the likelihood of settling (De Dreu et al., 1994).

Furthermore, empirical evidence shows that when prior information about the opponent's frame is given, negotiators are biased: knowing that their opponent has a loss frame generates a mismatch in their concession behavior leading them to be more cooperative (De Dreu et al., 1994). As a consequence, even though communicating a loss frame might still lead to settlement, these agreements reached are more likely to be distributive rather than integrative in nature, as the defensive and competitive orientation adopted by the loss-framed counterparty limits information sharing and joint value creation (De Dreu et al., 1994). Thus, loss-framed communication may lead to a lower-quality integrative solution and undermine joint value and satisfaction while potentially increasing perceived manipulation.

By contrast, as communicating a gain frame enhances cooperative attitudes, it increases not only the likelihood of settlement (De Dreu et al., 1994; Bottom & Studt, 1993), but it is predicted to also increase the probability that this agreement is an integrative solution, which is operationalized in this thesis as an agreement reflecting a victory for both parties within a joint value creation that exceeds a minimum integrative threshold. Therefore, framing does not just influence the likelihood of reaching an agreement (De Dreu et al., 1994; Bottom & Studt, 1993), but it is predicted to shape the integrative quality of agreement reached.

This implies that communicating a loss frame undermines negotiators' cooperative attitude (De Dreu et al., 1994), thus it might threaten integrative potential and lead to lower value negotiation outcomes, particularly subjective ones, even when the agreement is reached. By contrast, another relevant implication is the prediction that communicating a gain frame may lead to higher value negotiation outcomes. This aligns with the dual concern model, which states that negotiators who balance concern for self and concern for others are more likely to achieve integrative outcomes and sustainable agreements (Stuhlmacher & Citera, 2005).

Taken together, these mechanisms suggest that linguistic framing (losses versus gains) systematically influences cooperative attitude and, consequently, negotiation outcomes. In summary, it is predicted to operate through the following causal pathway, which represents the mechanism motivating the first and the second hypotheses:

- The communication of a loss frame activates a loss-based reference point and thus strengthens loss aversion, which in turn leads to competitive and

defensive decision making (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981; De Dreu et al., 1994).

- This psychological mechanism makes negotiators concede less and demand more thus limiting cooperative behavior and the chances of settling (De Dreu et al., 1994). Thus, it is predicted to decrease the likelihood of reaching an integrative agreement and, indirectly, to undermine negotiator's satisfaction.
- By contrast, the communication of a gain frame activates a gain-based reference point and thus attenuates loss aversion, enhancing cooperative behavior (De Dreu et al., 1994; Bottom & Studt, 1993). Hence, it is predicted to increase the likelihood of reaching an integrative agreement and to enhance negotiator's satisfaction.

Building on this theoretical framework, the following chapter extends these findings to digital negotiation scenarios and develops the hypothesis.

2.3.2 Brief Focus on the Reference Point

Neale and Bazerman (1992) stressed the importance of the reference point used as the starting point for the framing and evaluation of the options. This importance is exemplified by an experiment conducted by Neale and Bazerman (1992), in which executives at a Kellogg executive training program showed a higher willingness to pay for a beer if the beer was purchased at a "fancy resort hotel" (\$7.83) compared to a beer purchased at the "small, run-down grocery store" (\$4.10) (Neale and Bazerman, 1992). This differential behavior is due to the different reference points, and consequent frames, that were given to the executives (Neale and Bazerman, 1992).

Kahneman and Tversky in their Prospect Theory explained that "the carriers of value are changes in wealth or welfare, rather than final states" (1979), highlighting the relevance of personal perception and judgment: our perceptual apparatus defines a reference point based on past and present experience, a kind of adaptation level, and it evaluates relative changes - rather than absolute magnitude - based on this reference point² (Kahneman & Tversky, 1979).

Therefore, the reference point represents the starting point for the evaluation of outcomes as gains or losses (Kahneman & Tversky, 1979), playing a central role in the framing effect. Commonly, the reference point is the status quo, what is owned, so

² For example, an item can be perceived as hot or cold depending on the temperature of the person who touches it and the same level of wealth can be viewed like poverty or wellness depending on the current assets owned (Kahneman & Tversky, 1979).

people accept or reject an option based on whether and to what extent it will increase or decrease their own current inventory (Neale and Bazerman, 1992).

2.3.3 The Endowment Effect

It is interesting to observe that different roles (buyer, seller, or chooser) lead to the creation of different reference points (Neale and Bazerman, 1992). This happens because of the endowment effect, which indicates the tendency of people to value the goods included in the personal endowment (thus goods that are owned) more highly than identical goods not held in the endowment (Reb & Connolly, 2007). As a result, this mechanism increases the value of the owned goods (Kahneman et al., 1990). Furthermore, prior evidence highlights the instantaneous nature of the endowment effect, since individuals attribute the higher value to the good as soon as they are given the good (Kahneman et al., 1990).

In addition, previous literature also shows that the endowment effect is not limited to physical goods or legal entitlement, but it also involves terms of transaction and expectations of arrangements, with just one exception: goods that are purchased for resale rather than for consumption and utilization, for which the endowment effect is not observed (Kahneman et al., 1990).

As a consequence of loss aversion, according to which losses are weighted more strongly than gains when evaluating a choice (Tversky & Kahneman, 1981; Tversky & Kahneman, 1974), if a person owns a certain good, the perspective of losing it is perceived as a large loss but, if the person is not the owner, the idea of acquiring it is viewed as a small gain (Reb & Connolly, 2007). This highlights that the endowment effect shifts reference points (Reb & Connolly, 2007). Prior literature shows that such shifts are caused by a subjective sense of endowment, rather than a legal entitlement (Reb & Connolly, 2007). Hence, the higher evaluation of the goods owned comes from the “feelings of ownership induced by possessing an object, rather than legal ownership as such” (Reb & Connolly, 2007), being driven by psychological rather than factual ownership (Morewedge & Giblin, 2015). For this point, the literature provides an alternative explanation to loss aversion, explaining that ownership generates new “non-transferrable valenced” associations between the good and the self, leading the owner to imbue the good with attributes related to the self (Morewedge & Giblin, 2015). As the majority of self-evaluations are positive, these associations are also positive (Morewedge & Giblin, 2015). Thus, owning a good

deeply influences the relationship between the owner and this good, even though it is a commodity, due to the personal attachment created by the simple act of owning (Neale and Bazerman, 1992).

This relationship of ownership can also be created artificially by a negotiator giving up something to the other party, something that was previously part of the negotiator's endowment, so that the other party may perceive the concession as something they now own and may be reluctant to give it up³ (Neale & Bazerman, 1992; Rhode et al., 2014).

The endowment effect is investigated in this thesis by including an endowment cue in the negotiation proposal. This endowment cue is operationalized in the research design and experimental setup using a wording that frames the additional concession as part of the negotiator's endowment, trying to create an artificial and subjective sense of ownership.

In summary, the endowment effect activates psychological ownership links changing the reference point, thus increasing the subjective value attributed to a concession presented as part of the individual's endowment (Reb & Connolly, 2007; Kahneman et al., 1990). Therefore, this shift increases loss aversion to the concession (Kahneman et al., 1990) and thus giving it up is perceived by the individual as a loss rather than a neutral exchange (Reb & Connolly, 2007). Hence, the endowment effect is predicted to influence decision-making and outcomes in negotiation settings.

Nevertheless, given the fact that this endowment cue may foster rigidity or might promote strategic trade-offs (such as employing low-value and high-value concessions to optimize value while satisfying different parties' priorities) depending on contextual priorities, its impact on negotiation outcomes is theoretically ambiguous. Thus, in this thesis, the effect on negotiation outcomes of embedding an endowment cue in the negotiation proposal is treated as exploratory, and this is the mechanism that motivates the hypothesis H2a. Furthermore, adopting this communication strategy in the proposal might be perceived as an undue attempt to

³ If the situation is not really clear, the following example may help to clarify it. Rhode et al. (2014) provided this practical example in their working paper: a manager called Linda had received another job offer but she didn't want to leave her company, nevertheless she leveraged this opportunity to renegotiate her wage with her boss. She demanded a 20% wage rise and her bosses refused it, but then Linda stated that she could give up the company car which was already included in her contract wage (as she loves vintage cars she is not really interested in the company car) and her boss was happy because this would have allowed him to save the money of the leasing of the car. At the end, Linda achieved a 15% wage rise as she strengthened her bargaining position thanks to the early concession, especially by framing this proposal in such a way that "her concession is seen by her boss as a part of his endowment" (Rhode et al., 2014)

influence the other negotiator's preferences and decisions, potentially increasing perceived manipulation. This motivates hypothesis H2b.

The implication for the thesis lies in the potential of the endowment effect through concession cues to be studied further in negotiation research, since it may influence negotiation outcomes, potentially playing a role in determining the way parties make concessions. Nevertheless, it might be perceived as manipulative and raise ethical concerns.

Chapter 3 – Conceptual Framework: Digital Negotiation, Behavioral Ethics, and Hypotheses

3.1 Digital Negotiation

This thesis adopts the definition proposed by Stuhlmacher & Citera (2005), who define digital negotiation as negotiation taking place through mediated channels, such as videoconference, email, telephone and instant messaging, rather than face-to-face interactions (Stuhlmacher & Citera, 2005): digital negotiations are platform-, chat-, or text-based depending on the media chosen.

From a boundary-condition perspective, both the framing and the endowment effect might be stronger in digital settings due to the limited non-verbal cues, which may increase the reliance on linguistic information. Furthermore, digital negotiation might reduce reliability and trust in the counterparty as it is less “personified” and more anonymous, suggesting the adoption of a more defensive behavior as a response to a strengthened loss aversion and rigidity.

Digital negotiation, or Negotiation 4.0, has been reshaping contemporary socio-economic interactions as a consequence of the Industrial Revolution 4.0, which is driven by rapid technological development, the virtualization of communication, and the increasing availability of large datasets that shape decision-making processes (Kozina, 2022). Hence, Negotiation 4.0 is not merely a change in communication medium but a structural shift that impacts relational dynamics, information processing, and behavioral outcomes (Kozina, 2022).

As a matter of fact, negotiations increasingly take place through mediated channels, with consequent benefits and drawbacks (Stuhlmacher & Citera, 2005). These technologies on one hand offer significant advantages, including faster decision-making, reduced transaction costs, real-time information exchange and access to a broader range of potential negotiating partners (Kozina, 2022). On the other hand, they introduce new vulnerabilities, as online negotiations tend to be more fragile and easier to terminate, since they are more exposed to misunderstandings and uncertainty (Kozina, 2022).

One of the most relevant changes in digital negotiation concerns psychological distance between negotiators: computer-mediated communication limits non-verbal cues such as eye contact, body language and voice modulation and thus hinders social presence and immediacy (Stuhlmacher & Citera, 2005). According to the

psychological distance perspective, this reduction in social cues leads to depersonalization, lower empathy, and a weaker sense of accountability, increasing the likelihood of hostile or competitive behavior and decreasing cooperation (Stuhlmacher & Citera, 2005).

This view contrasts with the barrier effect hypothesis, which suggests that reducing visual contact will limit dominance behaviors, leading to a less hostile behavior, as it is assumed that such dominance attitude is related to the eye gaze (Stuhlmacher & Citera, 2005). Nevertheless, empirical evidence largely supports the psychological distance hypothesis, showing that face-to-face negotiations, where eye contact is present, tend to involve less hostility and generate higher joint profits than virtual negotiations (Stuhlmacher & Citera, 2005).

This implies that digital negotiation represents a fundamental part of the contemporary negotiation environment, including different types of mediated communication and offering negotiators the opportunity to choose strategically among them. This selection of communication media and the management of psychological distance is predicted to be highly important for mitigating the relational risks introduced by digital environments. Thus, another implication for the thesis is the acknowledgment of the relevance to properly choose the communication media with the purpose of favoring eye contact (thus reducing hostility): the preference for videoconferences reduces psychological distance by providing more social cues compared to the other media.

3.2 Behavioral Ethics

Negotiation research has long acknowledged the relevance of ethics in negotiation as psychological influence and persuasion are intrinsic components of the negotiation process (Neale & Bazerman, 1992). As a matter of fact, negotiators usually rely on communication strategies to shape decisions and attitudes of the counterparty, with the goal of aligning them with their own interests (Siagian et al., 2024). As Neale and Bazerman (1992) explain, some of these negotiation tactics are based on shaping subjective perceptions rather than changing objective payoffs. Therefore, such strategies lie in a “gray area”, a kind of ethical middle ground, being perceived as partially ethical, or acceptable only under certain conditions (Lewicki & Robinson, 1998). As a result, their adoption may raise ethical concerns, especially when these

tactics are grounded in linguistic manipulation, since language intricacies impact ethical discourse (Ishchuk et al., 2024).

Behavioral ethics is defined as “the study of systematic and predictable ways in which individuals make ethical decisions and judge the ethical decisions of others that are at odds with intuition” (Bazerman & Gino, 2012). This definition not only embraces the irrationality of decision makers, whose decisions are thus characterized by reference points, cognitive biases and context (Kahneman & Tversky, 1979), but also suggests the adoption of a descriptive approach rather than a normative one, an approach based on individuals’ actual perceptions and judgments (Bazerman & Gino, 2012).

In fact, consistent with this reasoning, the concept of fairness is perceived very subjectively: when shaping it, individuals are being biased by their own self-interests, especially in morally ambiguous settings where there are competing “focal points”, meaning different scenarios that could be plausibly perceived as fair (Babcock & Loewenstein, 1997). This suggests that ethical evaluations are subjective judgments, shaped by self-serving bias, egocentrism, personal traits, emotions, cultural patterns and all those elements that in turn influence the psychological processes from which the judgment arises. Thus, the same communication tactic might be judged as unethical manipulation or just as a simple and legitimate attempt at persuasion depending on how it is perceived by the counterparty (Bazerman et al., 2000).

Within this approach, subjective negotiation outcomes such as perceived fairness, trust, willingness to negotiate again, perceived manipulation etc. represent constructs based on personal and subjective perceptions. Particularly, this thesis analyzes perceived manipulation, which captures the extent to which individuals perceive that their preferences and decisions were unduly influenced by the counterparty’s communication strategies (Wölfl et al., 2023), making it measurable through the measurement of those perceptions.

The linguistic framing might be an example of these ethically ambiguous communication strategies. As a matter of fact, as it was explained in the previous section (2.3), the communication of equivalent outcomes framed as gains or losses influences the way decision makers - negotiators – make their choice, since the different framing changes the reference point from which outcomes are evaluated (Kahneman & Tversky, 1979). Particularly, as loss-framed language activates loss aversion (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981), loss-framed

communication may be perceived as more coercive, potentially generating pressure, threat and restriction of perceived choice. In addition, employing the endowment effect within a communication strategy could also belong to this “grey area”, as it could create a psychological ownership link thus leading to a subjective sense of endowment (Reb & Connolly, 2007; Kahneman et al., 1990).

The implication for this thesis is to integrate the ethical dimension of negotiation through the analysis of perceived manipulation as a subjective outcome. For linguistic framing, the study develops a directional prediction that loss-framed communication is expected to increase perceived manipulation compared to gain-framed communication, while the effect of the endowment cue remains exploratory. It adopts a descriptive and empirical approach rather than focusing on normative claims. This motivates hypothesis 1c and hypothesis 2b.

3.3 Final Hypotheses

The literature indicates that the framing effect influences negotiation outcomes by shaping negotiators’ reference points, their cooperative attitude and thus their negotiation behavior. Furthermore, some studies suggest that the endowment effect can influence negotiation outcomes as well. Building on this reasoning, this thesis tests first whether gain-framed communication increases the likelihood of reaching an integrative agreement (an agreement exceeding the predefined joint value threshold) in a digital and multi-issue negotiation setting and whether it increases negotiator’s satisfaction (hypothesis 1a and hypothesis 1b).

H1a: In a digital, multi-issue negotiation setting, participants exposed to gain-framed communication are more likely to reach an integrative agreement (an agreement exceeding the predefined joint value threshold) compared to participants exposed to loss-framed communication.

H1b: In a digital, multi-issue negotiation setting, participants exposed to gain-framed communication will report higher levels of satisfaction compared to participants exposed to loss-framed communication.

Secondly, this thesis aims to investigate how the endowment effect influences the same negotiation outcomes in a digital, multi-issue negotiation setting (hypothesis 2a).

H2a: In a digital, multi-issue negotiation setting, the presence of an endowment cue is expected to influence the likelihood of reaching an integrative agreement and the negotiator's satisfaction compared to neutral wording, although the direction of the effect remains theoretically ambiguous. Thus, it is studied empirically.

Furthermore, this study integrates the investigation of perceived manipulation, analyzing whether loss-framed communication increases perceived manipulation compared to gain-framed communication (H1c) and whether the endowment cue influences perceived manipulation (H2b).

H1c: In a digital, multi-issue negotiation setting, participants exposed to loss-framed communication are expected to report higher perceived manipulation than participants exposed to gain-framed communication.

H2b: In a digital, multi-issue negotiation setting, the presence of an endowment cue is expected to influence perceived manipulation compared to neutral wording.

The operational outcomes chosen are: agreement, integrative agreement - specifically, agreement as a baseline outcome, being integrative agreement conditional on the agreement - joint value, negotiator's satisfaction and perceived manipulation, with the aim of investigating both objective economic outcomes and subjective psychological outcomes.

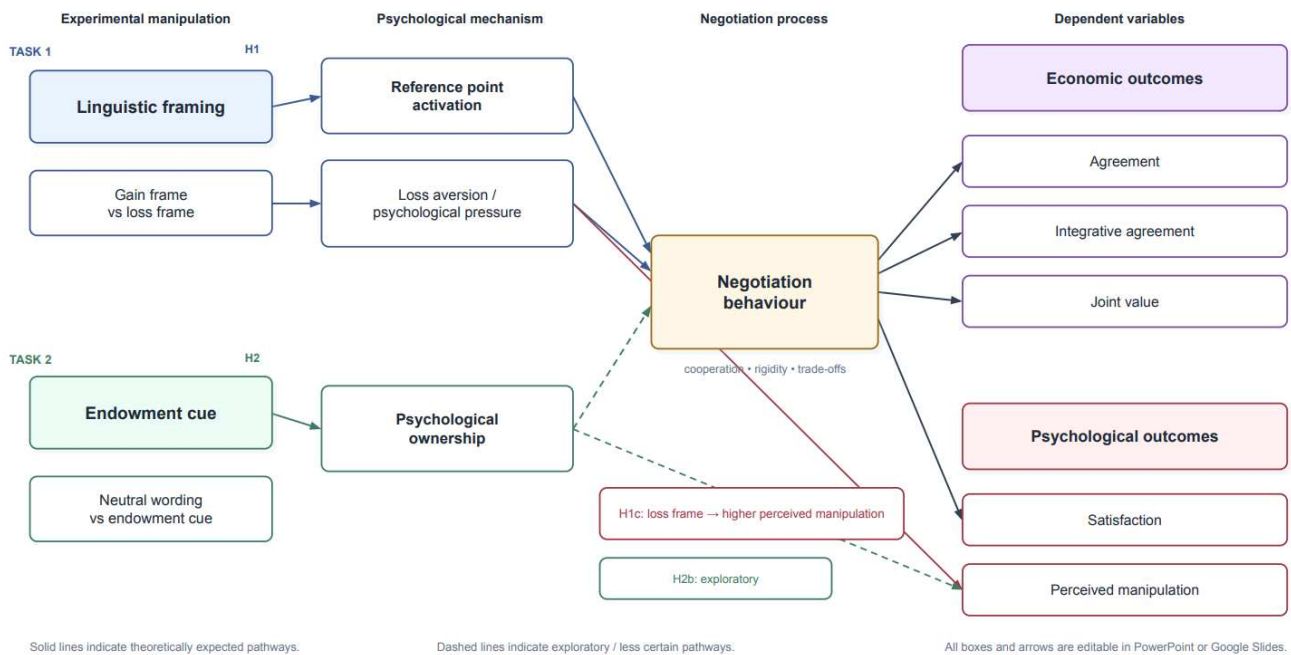
3.4 Conceptual Model

Figure 3.1 illustrates the conceptual model of this thesis. In Task 1, linguistic framing is expected to operate through the activation of a loss-based or gain-based reference point, respectively when communicating with a loss-framed language or a gain-framed language. Loss-framed communication generates a more extreme reaction due to loss aversion, as individuals tend to react strongly to losses (Tversky & Kahneman, 1974), thus negotiators tend to adopt a more competitive and contending attitude (De Dreu et al., 1994). By contrast, gain-framed negotiators tend to adopt a more cooperative behavior, increasing the likelihood of reaching an agreement and achieving higher benefits (Bottom & Studt, 1993). Thus, gain-framed communication is predicted to lead to higher value negotiation outcomes. In Task 2, the endowment

cue is expected to operate through psychological ownership. By presenting a concession as something to which the participant could be entitled, the endowment cue may shift the participant's reference point and increase attachment to that concession (Reb & Connolly, 2007). However, the direction of this effect is theoretically less certain. On one hand, psychological ownership may increase rigidity and rejection; on the other hand, it may support trade-offs if the concession is perceived as valuable within the negotiation package. For this reason, the pathways related to the endowment cue are treated as exploratory.

The model distinguishes between economic and psychological outcomes. Economic outcomes include agreement, integrative agreement, and joint value. Psychological outcomes include negotiator's satisfaction and perceived manipulation. Negotiation behavior is included as a theoretical process linking the manipulations to the observed outcomes, but it is not directly measured. Instead, it is inferred from participants' choices and from the joint value generated by the selected agreement. Similarly, reference point activation, loss aversion, psychological pressure, and psychological ownership are theorized mechanisms rather than directly observed variables. Overall, the conceptual model reflects the central logic of the thesis: slight linguistic variations in digital negotiation may not only affect economic outcomes, such as agreement and joint value, but also shape the subjective and ethical experience of negotiation.

Figure 3.1 - Conceptual Model



Conceptual model guiding this thesis. Solid arrows indicate theoretically expected pathways, while dashed arrows indicate exploratory or theoretically less certain pathways.

The model distinguishes between linguistic framing and endowment cues, the theorized psychological mechanisms, negotiation behavior, and economic and psychological outcomes.

Created by the author.

3.5 Short Preview of the Empirical Strategy

These hypotheses motivate two randomized wording-based experimental tasks, so the present study adopts an experimental design composed of two tasks, which present a structured video-mediated negotiation setting. Task 1 tests the effect of linguistic framing, comparing gain-framed and loss-framed communication. Task 2 explores the effect of an endowment cue, comparing neutral wording with a concession framed as something to which the participant could feel entitled. In both tasks, the economic structure of the negotiation and the payoff tables are held constant across conditions, allowing the analysis to isolate the effect of linguistic variations on economic and psychological outcomes.

The primary dependent variables included in the empirical strategy are: (1) agreement and (2) integrative agreement. The second one (2) describes the quality of the agreement reached, while the first one (1) describes the likelihood of reaching it.

Furthermore, the secondary dependent variables are: (3) joint value, (4) negotiator's satisfaction and (5) perceived manipulation.

Chapter 4 — Research Design and Methodology

4.1 Research Design

The present chapter describes the experimental design, procedure and empirical analysis adopted by this thesis in order to investigate the hypotheses.

Particularly, the experimental design consists of two sequential negotiation tasks administered within one survey, with a transition that separates the two experimental tasks clarifying that they are unrelated. More specifically, participants are engaged in a Qualtrics-based simulated digital negotiation scenario in which they are asked to imagine a Zoom-mediated interaction. In each task, participants are exposed to controlled linguistic variations in communication strategies, meaning that the negotiation proposal shows slight linguistic variations depending on the treatment to which the participant is initially assigned, while the negotiation structure and the payoff tables remain constant across conditions. The treatment is assigned randomly in both tasks.

This experimental approach isolates the effects of the manipulated independent variables on negotiation outcomes, both objective (agreement, integrative agreement, joint value) and subjective (satisfaction and perceived manipulation) ones, allowing for a causal test of the hypotheses.

Coherently with the focus on integrative negotiation, the experimental setting chosen reflects a multi-issue scenario, which is a structure that resembles, for example, negotiated agreements in creative industries - such as the music entertainment industry - due to the multiple interlinked clauses that negotiators need to settle simultaneously (Caves, 2003). This specific structure allows the creation of value through the identification of trade-offs across the negotiated issues to maximize the joint value (Lax & Sebenius, 1986). The negotiation setting was presented to participants through specific scripts, designed to enhance their immersion in the particular scenario described. These introductory vignettes are presented in Appendix A, along with the different wording used within the manipulated conditions for both tasks (gain frame versus loss frame in task 1 and neutral wording versus endowment cue in task 2).

4.2 Participants

Participants were recruited on a voluntary basis, both in person and online, through personal networks and social media platforms, including WhatsApp and Instagram, without any monetary or non-monetary compensation. Thus, the sample is a convenience sample. This thesis acknowledges the limits for external validity of adopting a convenience sample and tries to mitigate them with clear instructions, attention checks and transparent reporting. All participants provided informed consent before starting the experiment, in accordance with ethical research standards. The final sample includes 75 participants, each completing both experimental tasks within the same survey.

In each task, each participant was randomly assigned to one of the two experimental conditions, meaning that in the first task participants were presented either the gain-framed or the loss-framed proposal, while in the second one they were presented with either the proposal containing the concession framed as an endowment cue or the neutral wording proposal, in which the concession was presented simply as an option of the second offer. As the assignment was random, in order to verify the presence of an even distribution of participants across conditions, balance checks were performed during the data analysis.

4.3 Experimental Procedure

The experiment was conducted on Qualtrics, thus online, and access to the survey was provided by a specific link. The logic structure of the survey is displayed in the diagrams (figure B.1, figure B.2 and figure B.3) contained in Appendix B. First, the informed consent was presented to participants. Providing the consent was a necessary condition to proceed, so participants were directed toward the end of the survey if they chose not to provide the consent. Second, the negotiation context was illustrated to participants: they were introduced to the negotiation between John Reynolds, manager of a pop singer called Rosa Parker, and the representative of a music production company interested in producing Rosa. Participants were asked to imagine being John Reynolds in task 1 and the representative of the music production company in task 2. Eventually, they were informed that the negotiation

between the two parties would be held online through the digital platform Zoom⁴. The two negotiation tasks are explained specifically in the following section (4.3.1 and 4.3.2). Within the Qualtrics survey design, these two tasks were separated by two items measuring participants' prior experience in relation to the music entertainment industry and to the negotiation field, with the purpose of marking the end of task 1. In addition, to reduce the risk of potential carryover effects, participants were explicitly informed that the second negotiation task was unrelated to the first one. This separation aims to minimize learning and consistency biases across tasks. The demographic block - containing questions on age, gender, nationality, education, household income, numeric composition of the family household, employment status and professional and academic fields of participants - was presented after the end of task 2, right before the conclusion and the consequent end of the survey.

4.3.1 Task 1: Framing Effect

In the first task, participants were asked to imagine being John. They were initially informed that, within the (imaginary) Zoom video meeting, they would receive a proposal by the representative of the music production company and then they would have the possibility to accept it or to improve it with a counteroffer. Thus, participants were presented with this proposal, framed in terms of losses or gains depending on the treatment. To ensure the comprehension of the proposal, participants were asked to complete five questions as attention checks. If they got every answer right, they were allowed to go on. If not, they were presented again with the same proposal, followed by another round of attention checks. Then they were asked whether they wanted to accept the proposal or to reject it and make a counteroffer adjusting the terms. If they accepted the proposal, the negotiation ended and the agreement was recorded. If they chose to make a counteroffer, they were asked to select one level for each of the same three negotiated issues to adjust the terms, whose payoffs were calculated according to the payoff tables illustrated in section 4.5 (table 4.1). The counteroffer was accepted if the related individual value of the music production company (the counterparty) exceeded the predefined threshold of acceptance, which will be defined and explained in section 4.5.4, so participants

⁴ Methodological note: participants were engaged in a Qualtrics-based digital negotiation where they were asked to imagine conducting an online negotiation through the Zoom platform. This scenario was designed to resemble realistic digital negotiation settings.

received a message of acceptance or rejection depending on whether they reached an agreement or not.

At this point, they were presented with three sentences measuring their feeling of satisfaction with the negotiation outcome and process and they were asked to rate these sentences on a scale from 1 to 5. Then they were presented with three other sentences measuring their perception of manipulation during the negotiation task, so again they were asked to rate them on a scale from 1 to 5. Eventually, they were introduced to the manipulation check: a sentence asking whether the initial negotiation proposal emphasized losses - if the participant was initially assigned to the loss frame condition - or gains, if the participant was initially assigned to the gain frame condition. Participants were asked to rate from 1 to 5 the extent to which they agreed with this sentence. The first task ends in this way.

4.3.2 Task 2: Endowment Cue

In the second task, participants were asked to imagine being the representative of the music production company, inverting the roles. Participants were presented with two offers proposed by John (whose responses were simulated through the Qualtrics survey logic this time), phrased in terms of neutral wording or containing a concession framed as an endowment cue depending on the treatment randomly assigned. To ensure the comprehension of the proposals, participants were asked to complete four questions as attention checks. If they got every answer right, they were allowed to go on. If not, they were presented again with the same proposal, followed by another round of attention checks. The two options presented are characterized by different levels of the three negotiated issues, whose payoffs are calculated as in the first task according to the payoff tables illustrated in section 4.5. Then participants were asked to choose either one of the two options or to reject both of them. After that, the second task followed the same procedure of the first one, presenting the measurement of subjective outcomes: negotiator's satisfaction and perceived manipulation. As in the first task, participants completed a questionnaire with three sentences to be rated for each of the two subjective outcomes studied, both measured through a 5-point Likert scale. Eventually, the second negotiation task was concluded by three manipulation checks.

4.4 Experimental Manipulations

4.4.1 Framing Manipulation

In task 1, the manipulation was linguistic as the language of the proposal changed between the two different frames, keeping constant the substantive content. A numeric anchoring was included for the activation of the reference point, consistently with the Prospect Theory (Tversky & Kahneman, 1981; Kahneman & Tversky, 1979). In the gain frame condition the proposal was framed in terms of gains so in a way that emphasized the benefits and the opportunities linked with reaching the agreement. By contrast, in the loss frame condition the proposal was framed in terms of losses so in a way that emphasized the missed opportunities and the negative consequences linked to not reaching the agreement. For the different wording used in the manipulated condition, see Appendix A. In order to ensure that the differences in negotiation outcomes could be attributed solely to the framing manipulation, the negotiation structure and the payoff tables were identical across conditions.

4.4.2 Endowment Manipulation

In task 2, the manipulation was created by embedding an endowment cue in the negotiation proposal, since the participant was offered an additional concession in a way that suggested entitlement and possession. More specifically, in the manipulated condition the additional concession was framed as an endowment cue and it was presented before introducing the second offer. Embedding this endowment cue, on one hand, activates psychological ownership and, on the other hand, does not alter the objective payoff structure. In the neutral wording, instead, the same concession was presented as a standard negotiation concession included in the second offer, without any previous references suggesting entitlement. The negotiation scenario, including the payoff tables and the outcomes, remained constant. As for the framing manipulation, the specific wording used for the different treatment is presented in Appendix A. The fact that the economic structure was held constant allowed for the causal test of the endowment cue on negotiation outcomes, since it isolates the role played by psychological ownership.

4.5 Multi-issue Scenario: Payoffs & Value Creation

4.5.1 Negotiation Issues

The payoff structure is designed to represent a multi-issue negotiation scenario, where both distributive and integrative issues are involved, in order to allow value creation through the generation of valuable trade-off solutions (Lax & Sebenius, 1986). More specifically, the negotiated issues are: annual fixed payment, meaning the amount of money that the music production company is committed to pay to Rosa as a fixed wage per year, creative freedom, which is the creative control accorded by contract to Rosa on her music, and eventually the music production company's right to a percentage share from the revenue of Rosa's documentary.

On one hand, fixed payment is considered a distributive issue, as money is always a distributive issue, so gains for one party are losses for the other party and no creation of value is allowed. On the other hand, creative freedom and the music production company's right to the revenue share are integrative issues due to the parties' different priorities, so the payoff structure allows for value creation through trade-offs.

Rosa Parker, thus her manager John Reynolds who represents her in the negotiation scenario, prioritizes creative freedom, as she wants to hold the control of her artistic choices to be able to express herself through her own music. This is reflected by the asymmetric payoff structure related to this issue, where Rosa and John progressively gain more than the music production company loses going from the lowest level (limited) to the highest (complete) of the negotiated issue creative freedom.

By contrast, the music production company prioritizes achieving a high level of the revenue share over controlling the artistic direction of Rosa's career. The main reason is that this percentage share from Rosa's documentary represents a periodic cash flow free of fixed costs, which has the potential to increase as the success and the popularity of Rosa increase. Furthermore, although it may seem paradoxical, John also would not mind giving to the music production company a share of the documentary revenue since it would represent a relevant incentive for investing in the growth of Rosa⁵. This priority is reflected in the asymmetric structure of the payoffs of this negotiated issue. Such design allows the achievement of high joint value through trade-off solutions rather than by choosing the middle option as a sort

⁵ It is the same logic according to which the shareholders of a company give some shares to the managers who run the company as an incentive for good management in their own interest.

of compromise or convenient option. Therefore, the design of the payoff structure is aimed to avoid a dominant middle option while encouraging value creation through trade-offs across integrative issues. More specifically, the options that maximize joint value are the ones that combine high-value outcomes for each party within the issue they value the most.

4.5.2 Payoff Tables

The tables below (table 4.1) show the payoffs associated with each level of the negotiated issues. The numeric value of the payoffs was decided by the author in order to design an asymmetric and simple structure for the computation of individual and joint value, thus considering numbers in the range from 1 to 10. The first table illustrates the payoffs associated with the levels of annual fixed payment, presenting a symmetric structure since fixed payment is a distributive issue. The second table shows the payoffs associated with the levels of creative freedom, which is the artist's priority, so John and Rosa gain more when accorded the highest level of creative freedom and lose more when accorded the lowest level compared to the representative of the music production company. This is reflected in the asymmetric payoff structure. The same, though reversed, reasoning applies to the last table, presenting the payoffs associated with the levels of the share of Rosa's documentary revenue potentially assigned to the music production company.

Table 4.1 - Payoff Tables

<i>Fixed payment</i>	<i>John & Rosa</i>	<i>Music production company</i>
1M	5	1
700K	3	3
400K	1	5

<i>Creative Freedom</i>	<i>John & Rosa</i>	<i>Music production company</i>
Complete	7	1
Shared	4	3
Limited	1	4

<i>Revenue share</i>	<i>John & Rosa</i>	<i>Music production company</i>
5%	4	2
10%	3	4
15%	2	7

These tables illustrate the payoffs associated with each level of the negotiated issues.

Created by the author.

4.5.3 Operationalization of Integrative Agreement

In previous sections, integrative agreement has been defined as an agreement exceeding a threshold value, based on the definitions provided by the literature (see chapter 2 section 2.2). More specifically, at first the identification of this threshold was planned to be based on the Pareto-efficient frontier, considering an agreement Pareto efficient if there is no alternative allocation that can improve the payoff of one party without reducing the payoff of the other party. But then, as such frontier included also unreasonable solutions not consistent with the definitions of integrative agreement provided by the literature, this criterion was excluded and replaced by the one that was previously mentioned: the joint value threshold.

This empirical classification of agreements as integrative includes those agreements with joint value close to the frontier since they approximate Pareto efficiency. At the same time, this criterion considers small deviations caused by discrete choices. This approach follows the behavioral negotiation literature, where joint value is commonly used as an empirical measure. The threshold is defined as follows. Considering the payoff structure illustrated in the tables (table 4.1), the maximum joint value that can be achieved is 23. Thus, integrative agreements are identified through a joint value threshold that corresponds to 90% of the maximum achievable joint value, leading to a threshold value of 21 ($23 \times 90\% = 20.71$ rounded to 21). Hence, agreements generating a joint value equal to or greater than 21 are classified as integrative agreements, since they lie on or very close to the Pareto-efficient frontier reflecting effective trade-offs across issues rather than simple compromise solutions.

A more detailed illustration of the identification of the integrative agreements is provided by the table (table D.1) in Appendix D, where all the 27 combinations are illustrated ($3 \times 3 \times 3$) highlighting the integrative ones.

4.5.4 Counteroffer Rule

To ensure a realistic scenario, in task 1 the rule of acceptance or rejection of the counteroffer is based on a threshold that considers the payoffs gained just by the music production company (the counterparty). This threshold is calculated on the basis of the payoff tables presented above (table 4.1), in section 4.5.2, by summing the payoffs associated with the minimum - from the point of view of the music production company - level of fixed payment (distributive issue) and creative freedom

(integrative issue prioritized by John and Rosa) and the medium level of the revenue share, integrative issue prioritized by the music production company. Therefore, it is equal to 6. This threshold is introduced with the aim of increasing the realism of the negotiation scenario, ensuring that extremely asymmetric agreements, in which the counterparty's gains are very low, are not accepted as it would happen in a real-life situation.

Therefore, the counterparty - the representative of the music production company - accepts the participant's - John's - final proposal if the payoff associated with that proposal for the counterparty (MC_value) is equal to or above a predefined minimum acceptable level, corresponding to the threshold calculated above, equal to 6 (which can be defined as reservation threshold). If the proposal does not meet the threshold, the proposal is rejected and the negotiation ends in impasse (Agreement = 0). Thus, the joint value threshold is not used to determine acceptance, but only to classify the integrative quality of agreements after settlement. In task 2 it is up to participants to decide whether they want to accept one of the two offers or reject both of them, so this rule of acceptance is not introduced.

4.5.5 Outside Option

If no agreement is reached, both parties receive the outside-option payoff. In the present study, the outside option is fixed at 4 points for both John & Rosa and the music production company. For operational simplicity, this value corresponds to the minimum payoff that can be obtained within the experimental payoff structure (1+1+2). The outside option is held constant across all conditions and represents the fallback outcome available in case of impasse.

4.6 Measures: Dependent Variables

The present thesis adopts a multidimensional conception of negotiation outcomes so it includes both objective and subjective measures to study both economic and psychological outcomes. For this reason, the dependent variables studied are: agreement, integrative agreement, joint value, negotiator's satisfaction and perceived manipulation. A summary of all the variables that are part of the experimental setup is provided in Appendix C, containing the variable dictionary of this thesis.

In addition, attention checks and manipulation checks were added in order to verify the comprehension of the negotiation scenario by the participants and the

effectiveness of the experimental manipulation. In running the data analysis, these checks were used to perform a sensitivity analysis by restricting the sample only to those who have passed the checks.

4.6.1 Economic Measures

Integrative agreement (second primary outcome) is a hierarchical outcome, as it is operationalized through a two-step measure that reflects first the likelihood and then the quality of agreement. First, agreement (first primary outcome) is measured as a binary variable, equal to 1 if the agreement is reached and 0 if it is not. Secondly, integrative agreement is operationalized as a binary variable conditional on agreement. The integrative quality of the agreement is captured through joint value (first secondary outcome), defined as the sum of the payoffs associated with the alternative chosen by the participant. Joint value expresses the extent to which negotiators achieve joint gains by generating trade-offs within a multi-issue negotiation, reflecting the underlying cooperative behavior. This operationalization allows the study of whether and to what extent participants can “expand the pie” through cooperation, therefore distinguishing not only whether an agreement is reached but also whether it reflects true value creation.

4.6.2 Psychological Measures

Negotiator’s satisfaction is a subjective and psychological negotiation outcome. It is measured using a 5-point Likert scale for three items, where participants are asked to rate three sentences from 1 to 5 indicating their level of satisfaction. Measuring negotiator’s satisfaction complements the measurement of the economic outcomes as it captures participants’ feelings related to the negotiation outcome and process, reflecting subjective value in negotiation (Curhan et al., 2006).

Perceived manipulation is a subjective and psychological negotiation outcome and it was measured using three self-reported items on a 5-point Likert scale. This approach is consistent with behavioral ethics (see chapter 3 section 3.2), which grounds the conceptualization of perceived manipulation in subjective perceptions rather than moral judgments. The analysis of perceived manipulation complements economic outcomes and negotiator’s satisfaction since it captures the ethical boundary of the negotiation and indicates the extent to which participants perceived

an undue attempt at manipulation by the counterparty in influencing their preferences or decisions.

4.6.3 Checks

Attention checks were included in order to ensure that participants had understood correctly the negotiation proposals so they could make their choices consciously. In both tasks, after being presented with the negotiation proposal, participants were asked about the character they were impersonating and the value of the three negotiated issues in the proposal previously presented. In the first task, they were also asked whether the negotiation was held in person or via online meeting. If they made a mistake, they were presented with the same proposal one more time, and then again with the attention checks. By contrast, manipulation checks were included at the end of each negotiation task, after the subjective measures, in order to ensure the effectiveness of the experimental manipulations. Manipulation checks were measured using 5-point Likert scales.

As regards task 1 (the framing task), participants were asked to express to what extent the initial counterparty's proposal emphasized potential gains over potential losses or vice versa, depending on the treatment to which participants were randomly assigned.

As regards task 2 (the endowment task), participants were asked to express the extent to which they felt entitled to the additional concession and to evaluate the perceived loss associated with giving up that concession.

4.7 Data Analysis Strategy

4.7.1 Primary and Secondary Outcome Strategy

The primary outcomes of this thesis are: (1) agreement (binary: 1 = agreement, 0 = impasse), (2) integrative agreement (binary, conditional classification: 1 = agreement with joint value ≥ 21 ; 0 otherwise). Integrative agreement is operationalized as a negotiated agreement exceeding a certain joint value threshold, predefined on the basis of the definition provided by the literature (section 2.2). In this framework, agreement is considered as the baseline outcome, capturing the likelihood of reaching an agreement, and, only if the parties settle, the quality of the agreement is evaluated through joint value to classify it as integrative or not.

The secondary outcomes are: (3) joint value, conditional on agreement, (4) satisfaction index, (5) perceived manipulation index. Joint value is the sum of the parties' payoffs associated with the agreement reached and it is employed for the determination of the joint value threshold for the empirical classification of an agreement as integrative or not. In addition, it indicates how much value is created within the agreement. Satisfaction index is the mean of the negotiator's satisfaction measures, capturing negotiator's feelings about negotiation outcomes and process, while perceived manipulation index is the mean of the perceived manipulation measures, reflecting the extent to which negotiators felt unduly influenced. These two last secondary outcomes complement the investigation of economic outcomes, deepening the analysis of subjective value and ethical concerns.

4.7.2 Analysis Plan

This analysis plan is designed to causally test the effect of framing and endowment cue on negotiation outcomes, distinguishing between primary and secondary outcomes and using the following statistical techniques. Agreement, operationalized as a binary variable equal to 1 if the participants settle and equal to 0 otherwise, was analyzed through a logit model. Integrative agreement, operationalized as a binary variable too, equal to 1 if agreement with joint value ≥ 21 and equal to 0 otherwise, was analyzed through a logit model too. Joint value was analyzed as a continuous variable using the OLS regression model. Negotiator's satisfaction and perceived manipulation were first aggregated into composite indices by calculating the average of their items, creating a Satisfaction Index and a Perceived Manipulation Index, respectively, for each task, then these composite indices were analyzed through OLS regression. To test H1b and H1c, the Satisfaction Index and the Perceived Manipulation Index were regressed on the framing condition, with loss frame coded as the treatment condition. To test H2a and H2b, the same regression approach was applied to the endowment task, using the neutral wording condition as the treatment condition. For task 2, neutral wording was coded as 1 and the endowment-cue condition as 0. Furthermore, the Cronbach's alpha for each of them was calculated to report the alpha reliability of these indexes.

While individual Likert-scale items are ordinal in nature, composite indices tend to approximate an interval distribution (Carifio & Perla, 2008; Labovitz, 1970) and to be treated as continuous variables, making them suitable for OLS analysis.

Therefore, as both dependent variables (satisfaction and perceived manipulation) were constructed and analyzed as composite indices, the choice of performing an OLS regression is justified. In addition, this regression analysis was preferred over non-parametric methods for testing the hypotheses since it allows the precise estimation of effect sizes, showing the magnitude of the effect of the independent variable on the dependent variables. Furthermore, the non-parametric analysis of psychological measures was performed using the Mann-Whitney U test with the aim of validating the findings: the same results of the parametric analysis were observed. This non-parametric analysis is included in Appendix E.

In addition, in order to deepen the analysis, different statistical techniques were employed to investigate correlations between demographics and negotiation outcomes: Pearson's r correlation for age and gender, Spearman's rank correlation for income, education and prior music and negotiation experience, which are ordinal variables in nature, and Kruskal-Wallis H test for fields of work or study, nominal variable.

As explained in the previous section (4.5 and 4.6.1), the primary outcomes are agreement (extensive margin, baseline outcome), integrative agreement (intensive margin, conditional on agreement) while the secondary outcomes are joint value, negotiator's satisfaction and perceived manipulation.

4.7.3 Statistical Techniques

OLS (Ordinary Least Squares), also called linear regression, is a statistical technique used to analyze a continuous variable, meaning a variable that can assume any numeric value in a predefined interval. It works by calculating how much the value of the dependent variable (generally Y) changes for each unit change of the independent variable (generally X). Graphically, it draws a straight line through the data minimizing the distance between each point and the line itself. The line represents the conditional mean, meaning the general trend of the data.

By contrast, logit (logistic regression) is a statistical technique used to analyze a categorical and binary variable, meaning a variable that can assume only the value of 0 or 1. Differently from OLS, it does not measure changes in values, but it calculates the probability of an event to occur. Graphically, it draws a S-shape curve constrained between 0 and 1, where probabilities assume values between 0% and 100%.

The Cronbach's alpha is a statistical measure evaluating the degree to which a set of items are related as a group, indicating the extent to which they are consistently measuring the same construct. For good reliability in social sciences, a value of 0.70 or higher is accepted (Nunnally, 1978). The higher the alpha is, the higher the reliability is.

Furthermore, Chi-Square and P-value are calculated respectively to verify the presence of an association between two categorical variables and to determine the statistical significance of the results ($p\text{-value} < 0.05$).

Pearson's r correlation is used to assess the strength and the direction of the linear relationship between continuous variables, as it measures how much one variable changes in relation to the other one ($r = -1$ perfectly negative correlation, $r = 1$ perfectly positive correlation).

Instead, Spearman's rank correlation does not assume a linear distribution or a normal distribution of the data: it assesses the monotonic relationship between variables by employing the rank order of observations. Thus, it is used as a non-parametric alternative to Pearson's coefficient.

Kruskal-Wallis H test is employed to investigate potential differences across multiple independent groups, so it was used for investigating differences among the diverse study/work field of participants. It is an alternative to the ANOVA under some conditions, such as non-normal distribution of data and small groups.

The Mann-Whitney U test is a non-parametric test used to compare two independent groups when the outcome is ordinal or not normally distributed. It measures the difference between independent groups by comparing the ranks of the observed value.

Chapter 5 – Empirical Results

5.1 Sample Description

After the raw data cleaning, the sample consisted of 77 participants who completed the experimental procedures. Nevertheless, two of them did not provide consent to participate in this study. Hence, the final sample consists of 75 participants ($N = 75$).

The sample shows a wide age range: the mean age is 32.9 years while the median age is 24 years. A broad perspective is given by the inclusion of respondents up to 84 years old.

Regarding gender identity, the sample is mainly composed of females (58.67%). Males represent 37.33%, followed by small portions of non-binary participants (2.67%) and individuals who preferred not to disclose this information (1.33%).

In addition, the sample is quite homogeneous as regards nationality, since the vast majority of participants are Italian (97.33%), with one from Spain (1.33%) and one from Mexico (1.33%).

The educational background is also quite homogeneous, showing a well-educated sample: more than half hold a Degree (56%), particularly, 36% hold a Bachelor's Degree and 17.33% a Master's Degree, while 37.33% possess a high school diploma.

This structure reflects the employment status of participants, as the majority are students (46.7%), followed by a relevant percentage of full-time employees (25.33%). The remaining participants are part-time workers (9.33%), self-employed individuals (6.67%) and unemployed people (5.33%), with a small portion of retirees (2.67%), while 2.67% preferred not to disclose this information.

As regards their academic and professional field, one quarter of the participants selected “other” (20.00%), followed by Humanities (13.33%) and Education (12.00%). The remaining individuals are quite equally distributed among Arts (9.33%), Business (9.33%) and Economics (9.33%), with a little smaller percentage for Social Sciences (8.00%) and Medicine (5.33%). These data show a dominant humanistic-social field, with a smaller representation of purely scientific fields: Engineering (4.00%), Health Science (4.00%), Technology (2.67%) and Natural Sciences (2.67%).

Regarding the household, the most frequent income bracket of participants is 20,000-39,999€ (44%), with a relevant portion of individuals (22.67%) who preferred not to disclose this information, showing the sensitivity of the income data. The household composition is dominated by 3 members (36%) and 4 members (36%), followed by 2 members (10.67%), 5 members (8.00%), 1 member (8.00%) and 6 members (1.33%). These data show the tendency to live with a family of medium size (3 or 4 members) or with a partner (2 members).

As the mean score for both music industry experience (2.29) and negotiation experience (2.39) is placed below the midpoint of the Likert scale (3.00), the sample can be defined as composed primarily of laypeople rather than professionals. Thus, the sample represents a generalist audience that is less likely to be strongly influenced by prior professional experience. It is worth noting that participants generally rated their knowledge as modest.

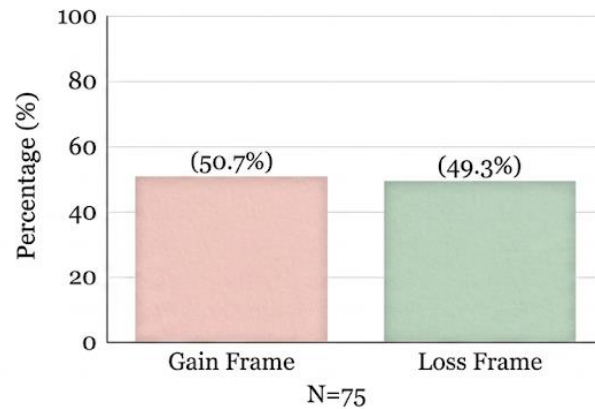
Nevertheless, there is still a "critical mass" of 30 participants that reported a score of 4 or 5 in the self-evaluation of music or negotiation experience, indicating the presence of a non-negligible subgroup. Furthermore, the closeness between the mean music (2.29) and negotiation (2.39) experience suggests a balanced challenge for participants.

5.2 Randomization and Balance Checks

Within the experimental procedures, participants were randomly assigned to the experimental conditions. Therefore, to verify that the random distribution was even across experimental conditions, balance tests were conducted. In the first negotiation task 38 participants were assigned to the gain frame condition (50.67%) and 37 participants were assigned to the loss frame condition (49.33%), ensuring a perfectly balanced randomization (figure 5.1⁶). In the second negotiation task 41 participants were assigned to the neutral wording condition (54.67%) and 34 participants were assigned to the endowment cue condition (45.3%), ensuring a balanced distribution as well (figure 5.2).

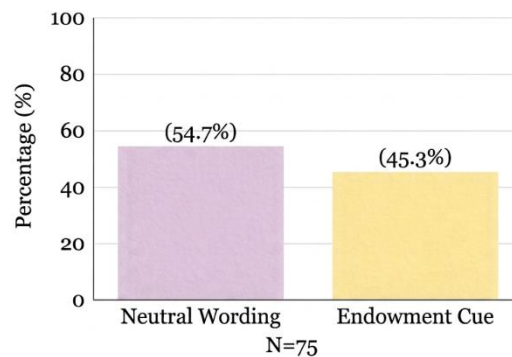
⁶ The graphs presented in this chapter were created by the author by generating them with Google Collaboratory on the basis of the results obtained with the data analysis. Then, Gemini AI was used to improve the aesthetics of the figures and to ensure visual consistency in the palette and labels.

Figure 5.1 - Simple Balance Check for Task 1



This bar chart illustrates the simple balance checks for task 1. It shows that the randomization process assigned participants evenly across conditions.

Figure 5.2 - Simple Balance Check for Task 2



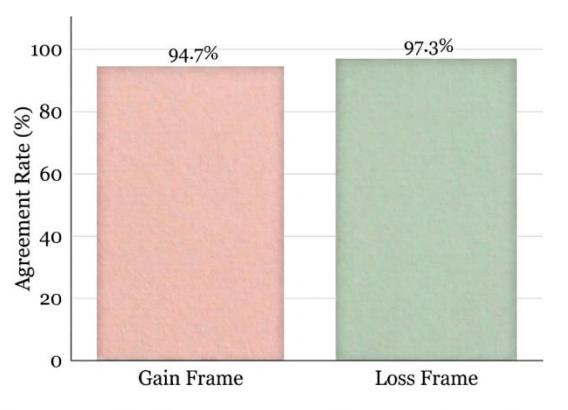
This bar chart illustrates the simple balance checks for task 2. It shows that the randomization process assigned participants evenly across conditions.

5.3 Empirical Findings from the Analysis of Task 1

5.3.1 Integrative Agreement: Hypothesis 1a

The first hypothesis (H1a) investigates whether gain-framed communication increases the likelihood of reaching an integrative agreement compared to loss-framed communication. To test this hypothesis, first, a logit regression was employed to analyze the likelihood of reaching an agreement, since agreement is the baseline outcome for the investigation of the integrative agreement. Considering the full sample ($N = 75$), the logit yielded a very high agreement rate across both the gain frame (94.7%) and the loss frame (97.3%) conditions. No statistical significance or noticeable difference between treatments was observed ($\beta = 0.693$, $SE = 1.247$, $p = 0.578$), as displayed in the graph below (figure 5.3).

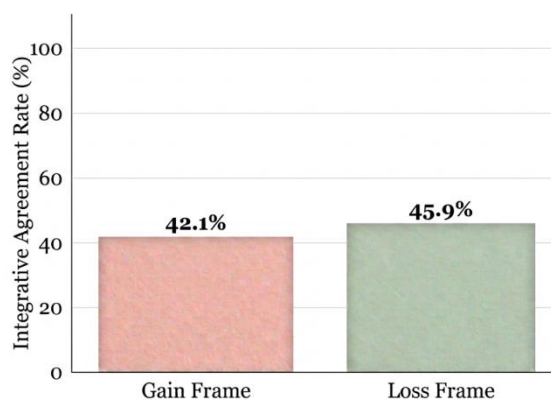
Figure 5.3 - Total Agreement Rate



This bar chart shows the proportions of participants reaching an agreement across gain frame and loss frame conditions, displaying visually very high and similar percentages.

Secondly, the same regression model was employed to investigate the integrative quality of the agreement reached. The logit analysis conducted yielded an integrative agreement rate of 42.1% for the gain frame condition and of 45.9% for the loss frame one, with a p-value of 0.738 and a treatment coefficient β of 0.156 ($SE = 0.466$), as illustrated in figure 5.4. Hence, the first hypothesis is not supported, suggesting that negotiators exposed to gain-framed communication are not more likely to reach an integrative agreement compared to negotiators exposed to loss-framed communication.

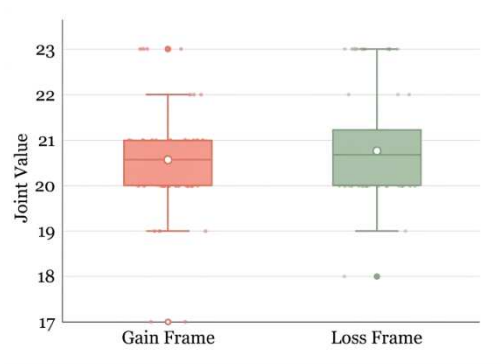
Figure 5.4 - Total Integrative Agreement Rate



This bar chart shows the proportions of participants reaching an integrative agreement across gain frame and loss frame conditions, displaying visually very similar percentages, as it was for the total agreement rate.

This is confirmed by the analysis of the joint value created, for which an OLS regression was conducted. It was observed that the mean joint value achieved by participants is very similar between the gain frame (20.58) and loss frame (20.78) conditions ($\beta = 0.194$, $SE = 0.322$, $p = 0.548$), as displayed in figure 5.5.

Figure 5.5 - Mean Joint Value



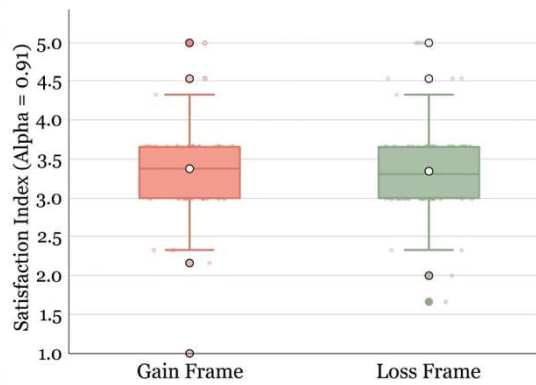
This box plot shows the mean joint value created by gain-framed participants and loss-framed ones, respectively.

A sensitivity analysis was performed in order to validate the findings. Particularly, the sample was restricted by narrowing the final sample ($N = 75$) down to participants who passed both the attention ($N = 49$) and the manipulation checks ($N = 32$) and the same logit and OLS analyses were performed again. However, the Welch p-value (1.000) indicated not only the absence of statistical significance, but also the lack of any interesting trends.

5.3.2 Negotiator's Satisfaction: Hypothesis 1b

The second hypothesis (H1b) investigates whether gain-framed communication increases negotiator's satisfaction compared to loss-framed communication. To test this hypothesis, the satisfaction index was calculated as the mean of the three satisfaction items, whose reliability was determined by calculating the alpha (0.906), and an OLS analysis was conducted. Using the full sample ($N = 75$), almost no difference was observed between gain frame (3.78) and loss frame (3.77) conditions as demonstrated by the treatment coefficient β which is close to 0 ($\beta = -0.006$, $SE = 0.204$) and no statistical significance was provided ($p = 0.977$). Therefore, the second hypothesis is not supported, indicating that gain-framed communication does not increase negotiator's satisfaction compared to loss-framed communication (figure 5.6).

Figure 5.6 - Satisfaction Index



This box plot shows the evaluation of satisfaction reported by participants across gain frame and loss frame conditions. Participants assigned to both treatments reported almost equal mean satisfaction indices.

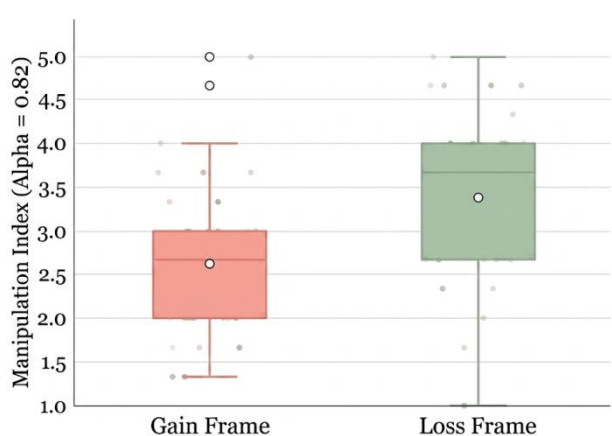
Nevertheless, restricting the sample to participants who passed both attention and manipulation checks ($N = 32$), a notable sensitivity pattern was observed. As a matter of fact, the mean satisfaction was slightly higher for the gain-framed group (4.09) compared to the loss-framed one (3.69), as it was predicted by the second hypothesis (H1b). Being a small sample, the Welch p-value was calculated (0.1870) as well as Cohen's d (0.463). Even though not statistically significant, this result showed an interesting trend suggesting that gain-framed communication may increase negotiator's satisfaction compared to loss-framed communication, to the extent that this gain frame is actually perceived.

5.3.3 Perceived Manipulation: Hypothesis 1c

The third hypothesis (H1c) investigates whether loss-framed communication is likely to be perceived as more manipulative than gain-framed communication. The perceived manipulation index was built as the mean of the three perceived manipulation items and the alpha (0.821) was calculated to ensure its reliability. As for the measurement of satisfaction, the OLS analysis was conducted, yielding significant results: loss-framed participants reported a slightly higher perceived manipulation mean score (3.39) compared to gain-framed participants (2.62) with $p < .001$, and the treatment coefficient indicating a medium effect ($\beta = 0.765$, $SE = 0.206$). Therefore, the hypothesis 1c is supported: consistent with H1c, participants in the loss-frame condition reported higher perceived manipulation than participants in the gain-frame condition. This result is displayed in the graph below (figure 5.7).

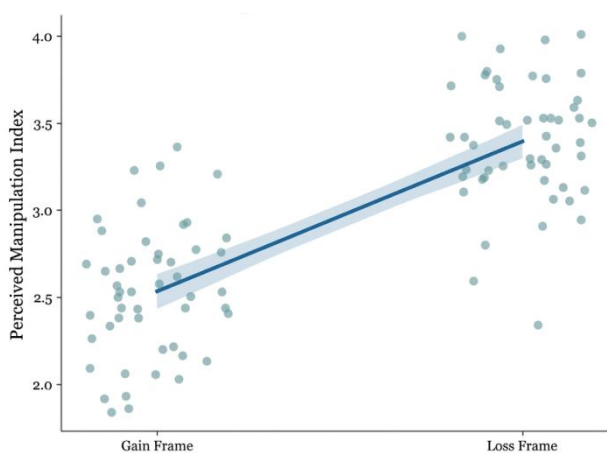
In addition, figure 5.8 displays the regression model, which shows the significant and positive relationship between the loss frame condition and the increased perceived manipulation. Looking at the graph, the blue line represents the linear regression model. The slope of this line visually reflects the treatment coefficient ($\beta = 0.765$), indicating that moving from the gain frame condition to the loss frame condition leads to an increase of 0.765 in the perceived manipulation index. The shaded area represents the 95% confidence interval, while the semi-transparent points highlight the distribution and the variance of individual data of participants.

Figure 5.7 - Perceived Manipulation Index



This box plot illustrates the evaluation of perceived manipulation by participants.

Figure 5.8 - Regression Line of the Perceived Manipulation Index



This regression plot shows the statistical visualization of the impact of framing on perceived manipulation.

Filtering the sample with attention and manipulation checks, an even more robust effect of framing on perceived manipulation was observed, showing a significant difference between loss frame (3.63) and gain frame (2.49) conditions (Welch p-value = .0002, Cohen's $d = 1.5000$). This result provides additional support for H1c.

In summary, the framing effect was not found to influence agreement, integrative agreement and negotiator's satisfaction, even though restricting the sample to participants who passed the attention and manipulation checks suggested the interesting trend of gain-framed communication increasing negotiator's satisfaction. Certainly, the most significant and robust finding is the effect of linguistic framing on perceived manipulation: loss-framed communication is perceived by negotiators as more manipulative than gain-framed communication.

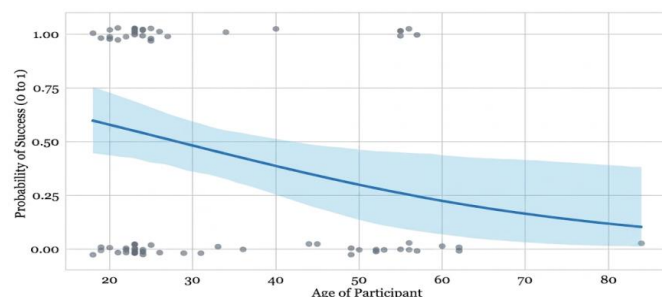
5.3.4 Exploratory Analysis for Task 1

In order to deepen the analysis, correlations between the negotiation outcomes achieved and the demographics were investigated using different statistical techniques (Pearson's r , Spearman's rank correlation ρ , Kruskal–Wallis H test). The most relevant results are presented in this section.

5.3.4.1 Age: a Factor of Success

First, a significant negative correlation was observed between age and achievement of an integrative agreement ($r = -0.269$, $p = 0.022$), showing a higher probability for younger participants to reach an integrative agreement (figure 5.9). No statistical support was found for the interaction between age and frame treatment.

Figure 5.9 - Relationship between Age and Integrative Agreement Rate



The regression plot illustrates a downward trend in the probability of reaching an integrative agreement as the age of participants increases.

5.3.4.2 Gender Analysis: Relationships with Psychological Measures

The gender analysis was conducted only considering participants who identified themselves as either female ($N = 42$) or male ($N = 28$), since five participants identified as non-binary ($N = 3$) or preferred not to specify ($N = 2$).

Gender shows a suggestive interaction with negotiator's satisfaction, even though it is not significant. Females showed a negative correlation with loss-framed communication ($r = -0.104$, $p = 0.5$), meaning that they reported higher satisfaction when the information was framed in terms of gain, while males showed an opposite correlation ($r = 0.176$, $p = 0.372$).

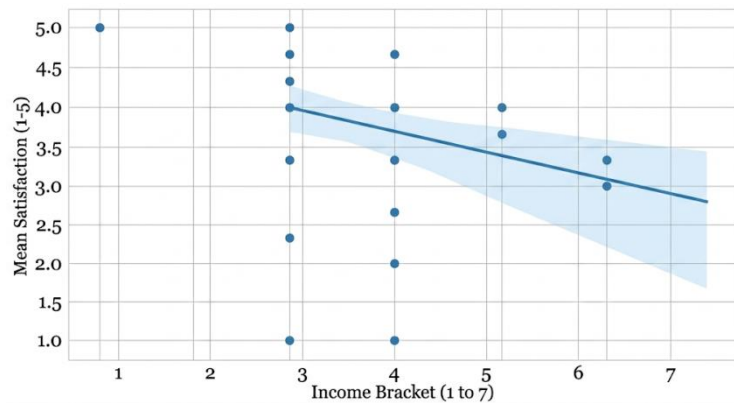
As regards perceived manipulation, even though both genders reported higher levels in the loss frame condition compared to the gain frame one, the correlation between loss frame treatment and perceived manipulation was qualitatively stronger for females ($r = 0.218$, $p = 0.154$) compared to males ($r = 0.153$, $p = 0.437$). Even though these sub-group correlations do not reach significance, most probably due to the reduced sample size, they still suggest a descriptive insight, meaning the qualitative observation that female participants may have reported higher sensitivity to the psychological framing of the proposal.

5.3.4.3 Household Income: Downward Trend for Satisfaction

To investigate whether the wealth status influenced participants' choices and perceptions, the Spearman's rank correlation (ρ) was employed to conduct a correlation analysis between household income and negotiation outcomes. This statistical technique was chosen instead of Pearson's r due to the ordinal nature of the income brackets.

While no interesting trends were observed for integrative agreement ($\rho = -0.061$, $p = 0.681$) and perceived manipulation ($\rho = 0.151$, $p = 0.266$), a statistically significant negative correlation was found between income and satisfaction index ($\rho = -0.452$, $p = 0.001$). This means that the satisfaction mean score decreased as the income increased (figure 5.10), indicating that higher-income participants reported lower levels of satisfaction.

Figure 5.10: Relationship between Income and Negotiator's Satisfaction



This regression plot describes visually the downward trend of negotiator's satisfaction as the household income increases.

A deeper analysis was conducted including the manipulated treatment and it revealed that the negative correlation previously observed was not uniform across conditions. In the gain frame condition, this correlation was strong and significant ($\rho = -0.541$, $p = 0.005$), indicating that wealthier participants exposed to gain-framed communication were more likely to feel less satisfied. By contrast, in the loss frame condition the correlation was weaker and not statistically significant ($\rho = -0.353$, $p = 0.091$).

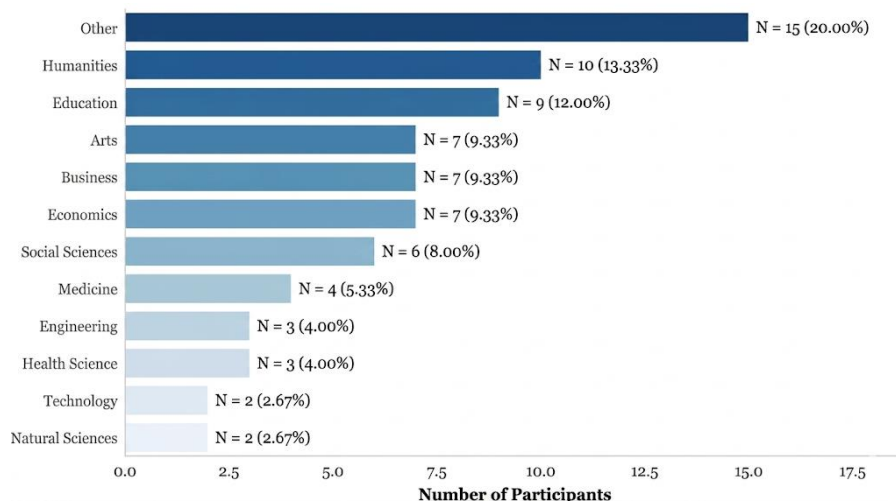
In addition, the correlation between household income and joint value indicates a suggestive downward trend ($\rho = -0.201$, $p = 0.170$), with higher-income brackets associated with lower joint value creation. Nevertheless, it is not statistically significant.

5.3.4.4 Academic & Professional Background: Descriptive Findings

In order to investigate the interaction between the academic or professional field of participants and negotiation outcomes, the Kruskal–Wallis H test was employed. This statistical measure is a more robust version of ANOVA, which is preferred over it in case of ordinal variables, non-normal distribution, different variances among groups or groups with very few participants. Although the small size of each group (see figure 5.11) prevents this thesis from drawing any causal conclusions related to these specific professional and academic fields, the descriptive trends presented in this section can offer heuristic insights, which might be explored empirically by future research. First, the analysis revealed a significant difference in joint value ($p =$

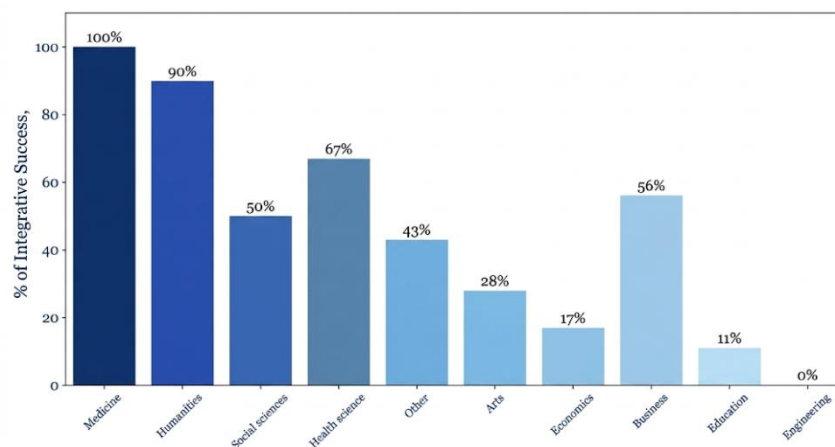
0.0012) and integrative agreement rate. As it can be observed by looking at the graph below (figure 5.12), participants from Medicine and Humanities reached the highest percentage of integrative agreement rate (100% and 90%, respectively), showing the highest integrative-agreement rates and the highest value creation in this sample ($M = 22.25$, $M = 22$, respectively). By contrast, participants from Engineering showed the lowest integrative agreement rate and value creation (0% integrative agreement rate, $M = 18$).

Figure 5.11 - Size of Groups based on Fields of Study and Work



This bar chart shows how participants are distributed among different fields of work and study.

Figure 5.12 - Integrative Agreement Rate across Fields of Study and Work



This bar chart illustrates the integrative agreement rate across the different professional and educational fields.

In addition, some noticeable differences were observed as regards satisfaction index and manipulation index across the groups, showing that subjective evaluations were mainly independent of the economic performance and the value created.

As regards satisfaction, an interesting "satisfaction gap" was observed between economic performance and subjective experience, as well as between participants belonging to a more scientific and analytic field and those who are from a more humanistic and holistic one. Business and Arts emerged as the most satisfied groups ($M = 4.14$, $M = 4.00$, respectively), despite having achieved intermediate scores of joint value. A difference was observed between Business and Economics, usually regarded as very close fields: participants from Economics, despite similar economic performance, reported lower satisfaction levels ($M = 3.29$) compared to participants from Business ($M = 4.14$).

As regards perceived manipulation, participants from Engineering reported the highest manipulation index ($M = 3.67$), followed by the Medicine group ($M = 3.58$).

5.3.4.5 Prior Knowledge: the "Experience Trap"

Although no statistically significant correlations were observed conducting the Spearman's rank analysis, some suggestive interactions between prior experience and negotiation outcomes can be highlighted. Experience in the music industry suggests a negative correlation with both joint value ($\rho = -0.190$, $p = 0.110$) and integrative agreement rate ($\rho = -0.186$, $p = 0.118$), and the same pattern emerged for negotiation experience ($\rho = -0.147$, $p = 0.219$ for joint value), showing a sort of "experience trap".

A deeper correlation analysis including the manipulated treatments showed that this descriptive negative trend was observed for both the music industry ($\rho = -0.261$, $p = 0.125$) and the negotiation field ($\rho = -0.193$, $p = 0.258$) under the gain frame condition, but not under the loss frame one ($\rho = -0.010$ and $\rho = 0.054$ for music industry and negotiation field, respectively).

5.3.4.6 Education

Investigating whether the educational level was correlated with negotiation outcomes, no significant or suggestive insights were observed. Spearman's correlation indicates the lack of relationship between educational level and negotiation

outcomes: joint value ($\rho = -0.017, p = 0.920$), satisfaction index ($\rho = -0.039, p = 0.813$), or the manipulation index ($\rho = -0.026, p = 0.875$).

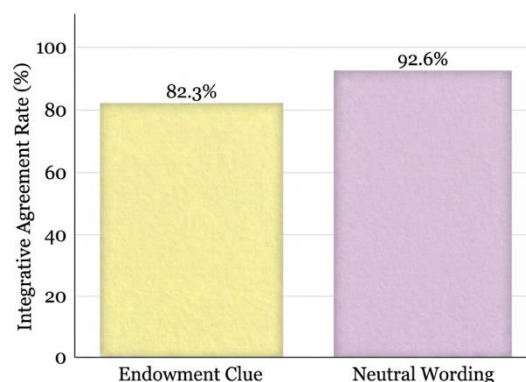
5.4 Empirical Findings from the Analysis of Task 2

5.4.1 Integrative Agreement, Joint Value & Satisfaction: Hypothesis 2a

The fourth hypothesis (H2a) analyzes the effect of embedding an endowment cue in the negotiation proposal on the likelihood of reaching an integrative agreement and on negotiator's satisfaction compared to neutral wording. First, the logit regression was employed for both the primary outcomes, agreement and integrative agreement. The two options among which participants could choose were both integrative solutions thus, if participants did not reject both options, agreement and integrative agreement overlap one another. Although no significant difference was observed ($\beta = 0.9985, SE = 0.750, p = 0.183$), a suggestive trend emerged looking at the different percentages: the neutral wording condition shows a slightly higher agreement/integrative agreement rate (92.6%) compared to the endowment cue condition (82.3%), as illustrated in figure 5.13.

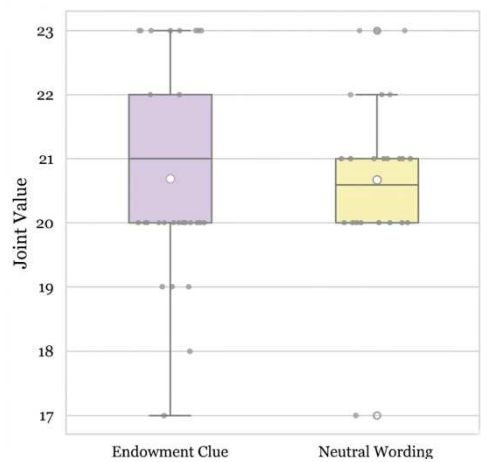
Similarly, the OLS regression used to analyze joint value yielded almost equal means for endowment cue (21.464) and neutral wording (21.526) conditions ($\beta = 0.062, SE = 0.324, p = 0.937$), as illustrated in figure 5.14.

Figure 5.13 - Integrative Agreement Rate in Task 2



This bar chart shows the percentage of participants reaching an integrative agreement across neutral wording and endowment cue conditions.

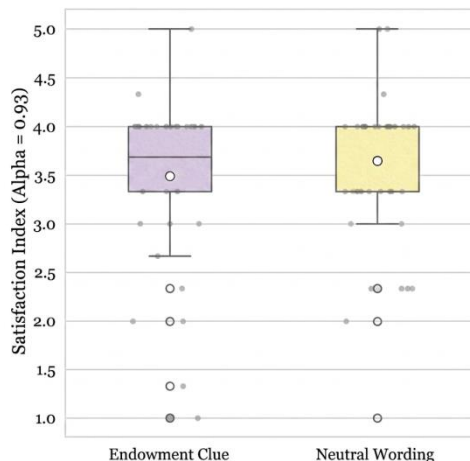
Figure 5.14 - Joint Value in Task 2



This box plot shows the joint value created by participants across neutral wording and endowment cue conditions.

As regards negotiator's satisfaction, the satisfaction index was calculated as the mean of the three satisfaction items and its alpha was calculated to verify its reliability (0.927); then an OLS regression was employed. Although participants assigned to the neutral wording condition reported slightly lower levels of satisfaction (3.49) compared to those who were assigned to the endowment cue condition (3.65), this difference is not statistically significant ($\beta = -0.1593$, $SE = 0.192$, $p = 0.408$) (figure 5.15). These results indicate that H2a is not supported, meaning that embedding an endowment cue in negotiation proposals does not significantly influence the likelihood of reaching an integrative agreement and the negotiator's satisfaction compared to neutral wording communication in this sample.

Figure 5.15 - Satisfaction Index in Task 2

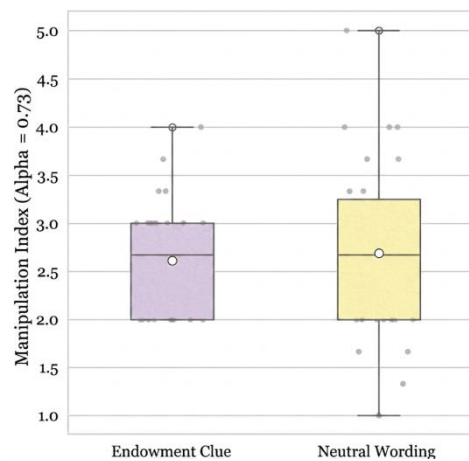


This box plot shows the satisfaction index across conditions.

5.4.2 Perceived Manipulation: Hypothesis 2b

Eventually, the fifth and last hypothesis (H2b) analyzes how the embedding of the endowment cue in negotiation proposals influences perceived manipulation. The perceived manipulation index was built as the mean of the three perceived manipulation items, the alpha was calculated to determine its reliability (0.732) and the OLS regression was employed. No statistical significance was found ($\beta = -0.0765$, $SE = 0.165$, $p = 0.644$) as no noticeable difference was observed (figure 5.16) between endowment cue ($M = 2.69$) and neutral wording ($M = 2.61$) conditions. Therefore, H2b is not supported, indicating that the endowment cue did not significantly influence perceived manipulation in digital negotiation in this sample.

Figure 5.16 - Perceived Manipulation Index in Task 2



This bar chart shows the manipulation index across neutral wording and endowment cue conditions.

The sensitivity analysis was performed by restricting the sample but it did not show any suggestive trends. H2a and H2b are not supported in any specifications.

5.4.3 Exploratory Analysis for Task 2

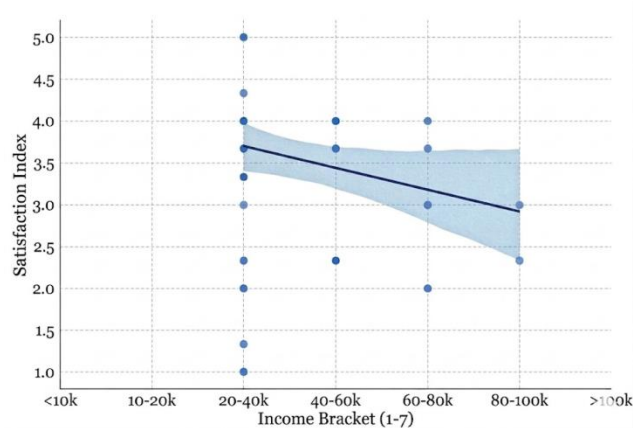
The correlation between age and negotiation outcomes yielded no significant results. Particularly, the correlation between age and joint value was completely absent ($p = 1.000$), as well as for integrative agreement, satisfaction ($p = 0.526$) and perceived manipulation ($p = 0.742$).

Regarding correlations with gender, weak relationships were observed for both the satisfaction index ($r = 0.133$, $p = 0.390$ for females; $r = 0.037$, $p = 0.814$ for

males) and the manipulation index ($r = -0.005$, $p = 0.980$ for females, $r = 0.08$, $p = 0.687$ for males), differently from task 1.

By contrast, investigating the relationship between household income and negotiation outcomes, a suggestive negative correlation with the satisfaction index was observed ($\rho = -0.279$, $p = 0.052$), which is illustrated graphically in figure 5.17. This means that higher-income participants tended to report lower satisfaction, mirroring the trend observed in the framing task.

Figure 5.17 - Relationship between Income and Satisfaction in Task 2



This regression plot graphically describes the downward trend of the satisfaction index that tend to decrease when moving to higher income brackets.

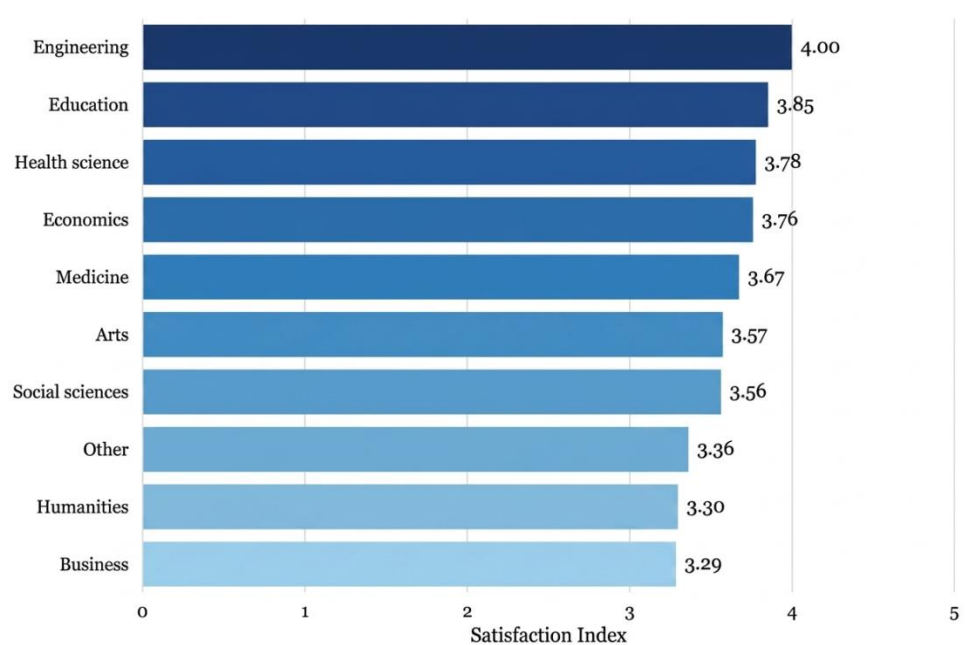
While the search for correlations with the educational level did not provide significant or suggestive results, when investigating the impact of the different academic and professional fields of participants on negotiation outcomes, a descriptive pattern was observed, particularly if compared to the results obtained in the first task. This comparison is displayed visually by the two graphs below (figure 5.18 and figure 5.19). Nevertheless, as explained for task 1, the different groups are characterized by a small size so this thesis only presents interesting data with a simple descriptive value. Participants showed almost equal economic performances but different subjective evaluations. The engineering group reported the highest level of both satisfaction ($M = 4.00$) and perceived manipulation ($M = 3.11$), while the Business group, which had appeared to be the most satisfied in the framing task, reported the lowest satisfaction mean score ($M = 3.29$). Participants from Humanities experienced a lower satisfaction as well ($M = 3.30$). Participants from Medicine, who have stood out in the framing task with top economic performances and highest

satisfaction score, here maintained a balanced position with a medium satisfaction mean ($M = 3.67$).

Eventually, investigating the correlation with prior experience in the fields, some interesting results were found. First, a significant positive correlation was observed between experience in the music industry and satisfaction, meaning that those who declared themselves experienced in the music industry also reported higher levels of satisfaction ($\rho = 0.306, p = 0.008$), despite having achieved no better economic performances compared to the novices ($\rho = -0.019, p = 0.882$).

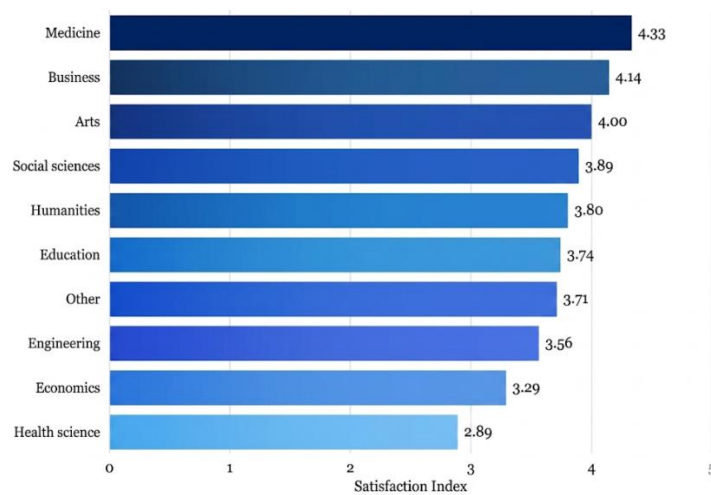
The same trend was observed for the negotiation field ($\rho = 0.273, p = 0.018$) as illustrated in figure 5.21. Furthermore, a suggestive interaction exists between experience in the music industry and perceived manipulation ($\rho = 0.213, p = 0.067$), meaning that participants with prior experience in the music industry were more likely to report higher perceived manipulation scores.

Figure 5.18 - Mean Satisfaction Index across Different Professional and Academic Fields for Task 2



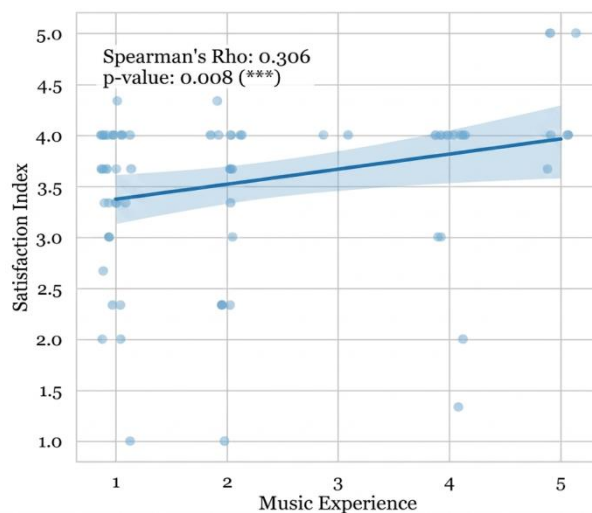
This bar chart highlights that the most satisfied participants are from Engineering, while the most dissatisfied are Humanities and Business.

Figure 5.19 - Mean Satisfaction Index across Different Professional and Academic Fields for Task 1



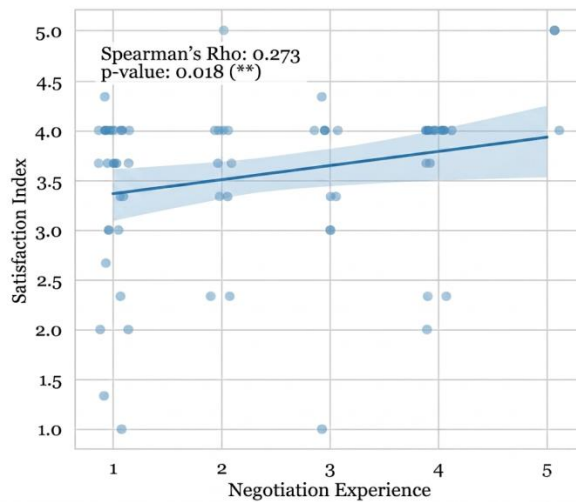
This bar chart highlights that the most satisfied participants are from Medicine, Business and Arts, while the most dissatisfied are Health Science, Economics and Engineering.

Figure 5.20 - Correlation between Negotiator's Satisfaction and Experience in the Music Industry



This regression plot shows a positive correlation between negotiator's satisfaction and experience in the music industry.

Figure 5.21 - Correlation between Negotiator's Satisfaction and Experience in the Negotiation Field



This regression plot shows a positive correlation between negotiator's satisfaction and experience in the negotiation field.

The most relevant of these findings are discussed and interpreted in chapter 6, by showing connections with existing literature and highlighting theoretical contributions and managerial implications. Eventually, the following chapter points out new directions for future research and concludes the thesis.

Chapter 6 – Discussion, Implications, and Conclusion

6.1 Introduction to the Discussion

The aim of this thesis is to investigate how the framing effect and the endowment effect influence negotiation outcomes in digital and multi-issue negotiation settings, analyzing economic and psychological outcomes. Given this, the findings described in Chapter 5 are now interpreted and discussed. First, the research questions - outlined in Chapter 1 - are reported in order to provide the complete big picture of the present study.

1. Does gain-framed communication increase the likelihood of reaching an integrative agreement in digital negotiation settings?
2. Does gain-framed communication lead to higher levels of satisfaction in digital negotiation settings?
3. Does loss-framed communication increase perceived manipulation compared to gain-framed communication in digital negotiation settings?
4. What is the effect of embedding an endowment cue in the negotiation proposal on integrative agreement and on negotiator's satisfaction in digital negotiation settings?
5. How does the endowment cue influence perceived manipulation in digital negotiation settings?

In chapter 5, the data analysis revealed no significant support for H1a, H1b, H2a and H2b, while showing a significant effect supporting H1c. Thus, the only research question for which a statistically significant answer emerged is the third one. In light of that, the most robust finding of this thesis is linked to the third research question and hypothesis (H1c). H1c predicted that loss-framed communication would increase perceived manipulation relative to gain-framed communication and the results support the predicted direction: loss-framed communication increased perceived manipulation compared to gain-framed communication. Hence, this hypothesis is supported.

As regards the other research questions and hypotheses, some descriptive trends were observed, providing heuristic insights that might be further investigated by future research. For example, as the following sections (6.2, 6.3, 6.7, 6.8) explain, the correlation analysis performed between negotiation outcomes and demographic data showed relationships suggesting the role of some demographics as potential

moderators. In addition, an interesting interpretation in light of the existing literature might lie behind the null results obtained for H2a and H2b, as explained in detail in section 6.6. Eventually, after highlighting the theoretical contributions and the managerial implications, this chapter acknowledges the limitations of the present study, develops some reflections about potential directions that might be undertaken by future research, and concludes the thesis.

6.2 Integrative Agreement & Joint Value

Starting the discussion with the first hypothesis (*H1a: In a digital, multi-issue negotiation setting, participants exposed to gain-framed communication are more likely to reach an integrative agreement compared to participants exposed to loss-framed communication*), no significant evidence or suggestive trends were observed. Therefore, this null result neither confirms nor expands existing literature (De Dreu et al., 1994; Bottom & Studt, 1993), since no significant differences were observed between treatments as regards agreement rate, integrative agreement rate and joint value creation. By contrast, prior studies show that the evaluation of outcomes as losses leads negotiators to adopt a competitive and defensive behavior (De Dreu et al., 1994), while evaluating outcomes as gains enhances a more cooperative attitude, making negotiators more prone to make concessions and demands, increasing the likelihood of agreement, and to achieve greater benefits (De Dreu et al., 1994; Bottom & Studt, 1993).

A factor that may have contributed to this null result is the reduced sample size ($N = 75$), which is acknowledged as a limitation of the study, since it hinders the possibility of running a large-scale investigation. Although the actual number of responses was definitely higher, many of them were not complete since respondents had not finished the whole survey, so these responses were excluded from the final sample ($N = 75$). Furthermore, differently from prior literature, the negotiation tasks were set in a multi-issue and digital scenario, thus the integrative nature of negotiated issues might have been such that the majority of participants selected relatively efficient agreements, leaving limited room for the framing manipulation to affect economic outcomes.

In addition, statistical significance was observed in the correlation between integrative agreement and age, as the success rate of integrative agreement went down with the increase of age. This may indicate that younger individuals are more

prone to reflect on the different parties' priorities and interests related to the negotiated issue in digital negotiation, eventually identifying trade-offs to create value. One possible explanation, to be tested in future research, is that younger people are more acquainted with digital technologies and thus they may feel more comfortable using digital platforms to communicate with other individuals, making them also more likely to detect the real interests behind the linguistic communication in spite of the limited non-verbal cues. Another possible explanation is that younger people might be also more open-minded, as they are growing and developing their personality in a more and more globalized world, being more exposed to cultural diversity.

6.3 Negotiator's Satisfaction: Suggestive Trends

As regards the second hypothesis (*H1b: In a digital, multi-issue negotiation setting, participants exposed to gain-framed communication will report higher levels of satisfaction compared to participants exposed to loss-framed communication*), even though the analysis of the full sample ($N = 75$) did not provide a significant effect, restricting the analysis to those participants who passed attention and manipulation checks a suggestive trend emerged. As a matter of fact, using this filtered sample, gain-framed participants reported slightly higher satisfaction compared to loss-framed participants, following the direction of the second hypothesis (H1b). This could mean gain-framed communication may actually increase the negotiator's satisfaction, as long as negotiators have actually understood the context and perceived the linguistic framing emphasizing gains instead of losses.

Furthermore, one significant trend was observed running the correlation between satisfaction and income: the mean satisfaction index decreased when moving to higher income brackets. Interestingly, this very same trend repeated itself when running the correlation between satisfaction and demographics in the second task, the endowment one. This suggests that higher-income participants reported lower satisfaction, and it can be associated with the marginal utility theory: individuals who have a greater economic endowment show a lower marginal utility for economic gains due to the diminished sensitivity associated with incremental gains (Tversky & Kahneman, 1981; Kahneman & Tversky, 1979). More specifically, this effect was observed with statistical significance under the gain frame condition. By contrast, the correlation between household income and satisfaction for loss-

framed participants was weaker and not fully statistically relevant. Interpreting these results, loss-framed communication may reduce heterogeneity in satisfaction across income groups by making potential losses more salient (Kahneman & Tversky, 1979), so that their feelings of satisfaction might not be influenced by the diminishing sensitivity of gains.

Eventually, though not fully significant, the suggestive trend observed running the correlations between negotiation outcomes and gender suggests that females might be more influenced by the linguistic frame in both their subjective feelings and perceptions, indicating a greater sensitivity to subjective negotiation outcomes compared to males. Particularly, females were more satisfied under the gain frame condition (while males showed the opposite trend) and felt qualitatively more manipulated than males under the loss frame condition (though males did show the same trend, just less strong). These results suggest the role of gender as a subtle moderator, since females' subjective experience appears to be more influenced by the linguistic frame, but subgroup results are exploratory.

These results, although not supporting the second hypothesis (H1b), are still descriptive since they provide new insights to existing literature related to subjective value in negotiation (Curhan et al., 2006).

6.4 Perceived Manipulation: the Most Robust Finding

The most robust and significant finding regards perceived manipulation, explored in the third hypothesis (*H1c: In a digital, multi-issue negotiation setting, participants exposed to loss-framed communication are expected to report higher perceived manipulation than participants exposed to gain-framed communication.*). Prior literature does not specifically establish a causal relationship between linguistic frame and perceived manipulation, which is why this result is particularly relevant. A p -value $< .001$ supports H1c: consistent with the predicted direction, loss-framed communication is perceived as more manipulative compared to the gain-framed one. In a world where subjectivity appears to emerge as an important dimension shaping human behaviors and relationships, achieving this significant result enriches existing literature related to ethics and subjective value in negotiation (Malutan, 2025; Curhan et al., 2006).

This increased feeling of perceived manipulation experienced under the loss frame condition aligns with the Prospect Theory and can be interpreted through the

lens of the work of Kahneman and Tversky (Tversky & Kahneman, 1981; Kahneman & Tversky, 1979; Tversky & Kahneman, 1974). Loss-framed communication may be perceived as more manipulative because it triggers loss aversion and may create psychological pressure, so negotiators may have perceived the communication as more coercive. In fact, loss-framed language can be interpreted as a threat to one's current status, thus as an undue attempt to restrict the freedom of choice, raising the feeling of being manipulated.

First, it is worth highlighting that the perception of manipulation did not negatively impact economic outcomes, suggesting that individuals were able to separate economic outcomes and psychological perceptions, shaping their behavior in such a way that economic performances were not influenced by their inner judgments and emotional status. However, this applies only to immediate economic performance. As a matter of fact, according to prior literature, perceived manipulation is likely to damage willingness to negotiate again and future relationships, since individuals tend to consider the unethical behavior of the counterparty as indicative of the whole character, compromising public image and potentially causing reputational damage (Malutan, 2025). Therefore, it would be interesting for future research to explore how this feeling of perceived manipulation increased by loss-framed communication influences future negotiation outcomes and future relationships.

In fact, focusing on the music entertainment industry, chosen as the experimental scenario, another relevant interpretation emerges from this finding. Loss-framed negotiation tactics might be employed to close a contract quickly in order to ensure short-term success, thus achieving short-term gains. Nevertheless, the present study highlights the hidden costs that may lie behind such temporary achievements. The result showing that participants exposed to loss-framed communication left the table feeling manipulated by the counterparty and prior literature stating that this perception might undermine future relationships with that counterparty (Malutan, 2025) are particularly relevant in industries like the music entertainment industry, which is a business built on long-term trust and connections. The artist-manager relationship or the artist-label relationship are some examples of this. Perceiving an attempt to be unduly manipulated could weaken this trust and thus may lead parties to seek a way out of the contract or refuse future collaborations.

6.5 Endowment Cue: Rise of Rejection and Rigidity?

Regarding the fourth (*H2a: In a digital, multi-issue negotiation setting, the presence of an endowment cue is expected to influence the likelihood of reaching an integrative agreement and the negotiator's satisfaction compared to neutral wording, although the direction of the effect remains theoretically ambiguous. Thus, it is studied empirically*) and the fifth (*H2b: In a digital, multi-issue negotiation setting, the presence of an endowment cue is expected to influence perceived manipulation compared to neutral wording*) hypothesis, no significant findings were observed using logit and OLS regression, but looking at the percentages a slightly higher agreement rate was observed under the neutral wording condition (see chapter 5). The absolute frequencies further support this descriptive insight: in the endowment treatment 6 out of 34 participants (17.65%) rejected the deal, while in the neutral wording treatment only 3 out of 41 (7.32%) did so. Simultaneously, the percentage of participants choosing option A - the one without the concession presented as an endowment cue in the proposal - dropped from 20 (48.8%) in the neutral wording treatment to 13 (38.2%) in the endowment treatment, in favor of the rejection of both options. This suggests that the endowment cue may have increased the rigidity, making participants more attached to the concession (the clause, part of Option B) and might have led them to prefer the impasse over losing this concession (meaning choosing the option without it). This follows prior literature explaining that the endowment effect shifts the reference point by enhancing loss aversion due to the personal attachment created between the owner and the item part of the owner's endowment, thus the reaction to losing this item is qualitatively stronger precisely due to this loss aversion enforced by the psychological ownership link (Reb & Connolly, 2007; Kahneman et al., 1990). Nevertheless, this is just an exploratory interpretation.

In addition, participants did not report higher perceived manipulation in this sample. Instead, the pattern is consistent with the possibility that the cue increased psychological ownership.

One possible explanation is that particularly in the music entertainment industry, where intangible assets are deeply relevant, introducing in the negotiation proposal such strict clauses and leveraging a sense of ownership on the artist's rights may be a very risky move, especially if not adequately compensated.

6.6 The Other Side of the Coin: Endowment Cue as a Nudge?

Looking at the results of task 2 with a different perspective, a new interpretation might emerge. The different particular perspective assumed is the one of Rhode et al. (2014), whose study identifies seven negotiation tactics rooted in psychological influence, among which two were based on the endowment effect. This thesis does not provide direct support for this interpretation, but the null result for perceived manipulation suggests that future research could examine whether endowment cues operate as subtle nudges in negotiation. Nudging is defined as an “element of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives” (Thaler & Sunstein, 2008; Thaler & Sunstein, 2003). Some examples of how nudging works are: optical illusion, social proof and priming. Priming refers to the fact that information already in our mind affects the way we perceive information afterward, so it occurs when a previously encountered stimulus (an image or a word) unconsciously influences the response to another stimulus. Therefore, a negotiation strategy based on the endowment cue might influence the negotiator’s decision-making through this priming mechanism, but this is solely an exploratory interpretation.

Nevertheless, the question of whether it actually makes sense to build a strategy on the endowment effect as it was proposed by Rhode et al. (2014), as the findings of this study appear not to suggest to follow this direction, still remains.

6.7 The “Experience Trap”: Overconfidence Bias

Some trends were observed analyzing the participants with prior experience in the music or negotiation field within both negotiation tasks, although the majority of them are not significant and just provide descriptive insights. In task 1, under the gain frame condition participants with experience in the music industry or in the negotiation field have reached worse economic performances, suggesting that the gain frame may have enhanced their confidence in their capabilities. This pattern is consistent with a possible overconfidence interpretation, although it remains exploratory. The overconfidence bias occurs when “someone's subjective confidence in their judgments is reliably greater than the objective accuracy of those judgments” (Lichtenstein et al., 1982), indicating an overreliance in one’s own capabilities and performances. By contrast, under the loss frame condition this correlation didn’t appear.

In task 2, a kind of self-accomplishment was observed for music-experienced participants, as displayed by the positive and significant correlation between experience in the music industry and satisfaction. A possible interpretation could be represented again by the overconfidence bias, particularly its form of “overestimation” (Moore & Healy, 2008) which made individuals feel more satisfied due to their superior experience, regardless of their objective economic performance. They have also reported higher levels of perceived manipulation, suggesting their ability to detect undue attempts at influence but simultaneously maintaining this perception separated from the feelings of satisfaction (though this is just a suggestive trend).

6.8 Academic & Professional Fields

As regards exploratory findings, significant correlations with some demographics were found. A significant correlation was observed between economic outcome and academic and professional field of participants. As mentioned in chapter 5, the size of each group is small so the following findings should be regarded purely as exploratory reflections rather than empirical conclusions, which might be interesting for future investigation. Participants from Medicine reached the highest success rate of integrative agreement (100%) and the greatest joint value creation, followed by the Humanities group (90%), while participants from Engineering did not reach a single integrative agreement (with a success rate equal to 0%). In order to understand and interpret these results properly, it may be useful to remember the particular scenario in which the negotiation was set: digital, multi-issue and integrative. This multi-issue nature suggests that the key to unlock the joint value creation, thus the achievement of the integrative agreement, is to understand the parties’ different priorities and consequentially to identify trade-offs (Lax & Sebenius, 1986). One possible explanation is that this mutual understanding could be linked to negotiators’ capability of being empathetic. Rogers (1975) explains that being empathetic is a process involving “being sensitive, moment by moment, to the changing felt meanings which flow in this other person” as it means “entering the private perceptual world of the other and becoming thoroughly at home in it” (Rogers, 1975). Being a process and a way of being, empathy may be cultivated with practice and education. Particularly, Medicine and Humanities teach about building and cultivating relationships, adopting a people-oriented approach. In Medicine,

interpersonal skills are developed in order to create a successful therapeutic doctor-patient relationship, which consists of “shared perceptions and feelings regarding the nature of the problem, goals of treatment” (Ha & Longnecker, 2010). In order to improve these skills, specific strategies are employed, such as attentive listening skills, empathy, open-ended questions, as well as specific training aimed to enhance collaborative communication as a reciprocal and dynamic relationship (Ha & Longnecker, 2010). Regarding Humanities, the study of classic and contemporary literature, of philosophy and history, of ancient and modern languages, may enhance the development of critical and lateral thinking. Particularly, the philosopher Nussbaum (2002) discusses what might be one of the greatest advantages of humanistic studies: “narrative imagination”, the capability of being an “intelligent reader” of others’ stories, understanding their emotions, wishes and desires (Nussbaum, 2002). In summary, these results suggest the adoption of a people-oriented approach combined with critical thinking and holistic vision in order to unlock the integrative potential of a multi-issue negotiation. This is further supported by the fact that, in this sample, engineers did not reach integrative agreements, which might be linked to a stronger fixed-pie bias, since their analytical thinking might lead them to consider negotiation as a closed logical problem, a zero-sum game, where one side's gain necessarily implies the other's loss. As a matter of fact, the fixed-pie bias is represented by the belief that parties’ interests are completely opposite, leading negotiators to consider negotiation as a win-lose situation and failing to recognize “the potential for mutually beneficial trade-offs” (Bazerman, 1983). By contrast, this fixed-pie bias may have been broken by lateral thinking, which might facilitate the identification of different priorities, thus the generation of higher joint value through trade-offs rather than a simple division of a fixed amount of resources (Lax & Sebenius, 1986). These patterns should be treated as descriptive only.

Furthermore, the Medicine group achieved not only the best economic performances but also reported the highest mean satisfaction score, suggesting a balanced reasoning and thinking. Furthermore, two other groups emerged as the second and the third most satisfied: Business and Arts, despite having achieved just intermediate economic performances. In addition, it is interesting to observe that participants from Economics, which is a field commonly associated with Business, reported instead one of the lowest mean satisfaction scores. These results might be interpreted in the light of what individuals from each group may value the most:

individuals from Business may put much value in the fact of having reached the agreement, probably considering it as a professional success, regardless of the potential value left on the table, while individuals from Arts may put much value in the fact of communicating with the counterparty and reaching the agreement, maybe considering it as a personal success, regardless of the actual economic outcome.

6.9 Theoretical Contributions & Managerial Implications

In light of the results described in the previous chapter and discussed in the present one, the main theoretical contribution is not simply that framing affects perceived manipulation, but that loss-framed communication is perceived as more manipulative than gain-framed communication in digital, multi-issue negotiation. This result provides existing literature with new insights on the ethical dimension of negotiation, opening avenues for deeper investigation on how this feeling of manipulation may influence willingness to negotiate again, future relationships, reputation and image. Eventually, the findings obtained in task 2 and their interpretation might contribute to the study by Rhode et al. (2014) by examining whether endowment-based negotiation tactics are perceived as manipulative.

Particularly, this thesis contributes to the work of De Dreu et al. (1994), Bottom & Studt (1993), Malutan (2025), Neale & Bazerman (1992), Sebenius (2015), Lax & Sebenius (1986), Curhan et al. (2006) and Rhode et al. (2014), by integrating negotiation and decision-making literature, with a focus on integrative negotiation, value creation, subjective value and ethics.

By contrast, reflecting on the practical contributions coming from these findings, this thesis presents the following managerial implications:

1. The awareness that communicating loss-framed information makes the counterparty feel more manipulated, with the risk of compromising future relationships and public image. As the data analysis showed no significant difference in economic outcomes between treatments, it may not be worth adopting loss-framed communication and taking that future risk since it appears not to lead to better economic performances.
2. The acknowledgement that, as digital settings are characterized by limited non-verbal cues, language becomes the primary carrier of intent, expressing the will and the attitude of negotiators, so it may be easier to make the counterparty feel manipulated presenting the counterparty with a loss-framed

proposal. Hence, in order to prevent potential negative implications such as reputational damages and to preserve social capital, managers are suggested to adopt a gain-framed communication particularly in digital negotiations.

Other exploratory managerial implications are:

3. The development of coaching sessions to recognise, be aware of and control the overconfidence bias, since in this study participants with prior experience seemed to be susceptible to it.
4. The implementation of reverse mentoring programs in which younger employees, being 'digital natives', can share their natural attitude and fluency with digital media, helping senior managers to acquire more confidence while using these digital platforms, thus while negotiating in digital settings. In addition, since younger generations appeared - in this study - to be more prone to creating value, these reverse mentoring programs might also help senior managers to move away from distributive approaches assuming a fixed pie of resources. Therefore, these programs could help bridge the generational gaps in both technical and strategic terms.
5. An even more exploratory implication concerns the potential value of negotiation training inspired by communication strategies employed in Medicine to build a collaborative-communication relationship and by humanistic content to improve critical thinking and “narrative imagination”. However, being the size of each group small, this last implication would require further investigation by future research.

In summary, the strongest managerial implication concerns the ethical and relational risk of loss-framed communication. By contrast, the implications related to age, prior experience, and academic/professional field should be presented as exploratory suggestions requiring further research.

6.10 Limitations of the Study & Directions for Future Research

The main limitations of the study are represented by the sample composition, being a convenience sample, and especially by the sample size, as after cleaning the data the number of responses dropped drastically to $N = 75$. Probably, a larger number of responses could have led to a higher number of statistically significant results. One limitation related to the sample composition is the small presence of individuals with

experience in the fields in which the simulated negotiation was set (music industry and negotiation). On one hand, this ensured that most of the participants were not influenced by prior knowledge, but on the other hand it would have been interesting to study a sample of professionals in order to provide more specific insights. Nevertheless, demographics showed that the sample analyzed was a well-educated sample meaning that participants are attending or have attended university. Based on these limitations, future research might consider the possibility to re-run this experiment with a bigger sample and, more specifically, with a bigger sample of professionals in the negotiation field and in the music industry, maybe involving individuals that actually work as artist managers and record label representatives.

Furthermore, in the experimental design implemented through Qualtrics, participants were not negotiating with another individual, but with the “system” of Qualtrics, whose responses were pre-defined on the basis of the participants' choices. Future research might make the experimental design interactive and run the experiment by pairing participants in such a way that a real interactive negotiation is simulated.

In addition, one of the strengths of this thesis may be the experimental design developed to study the integrative agreement, namely the multi-issue scenario adapted with the payoff tables showing the different parties' priorities and the hidden valuable trade-offs. Thus, a direction for future research might be investigating the primary outcomes of this study (agreement and integrative agreement) using this kind of structure, properly adapted and using an improved sample composition and size.

As regards the results obtained by the present study, a direction for future research is offered by the most robust finding: the fact that loss-framed communication makes individuals feel more manipulated compared to gain-framed communication. In light of this, future research could explore the future consequences of this feeling by examining whether feeling manipulated affects willingness to negotiate again, trust, reputation, public image and future relationships. Furthermore, future studies may also preregister this hypothesis and test it in larger and more interactive negotiation settings. In addition, future research might investigate whether this effect is observed also in different contexts, such as face-to-face or text-based negotiations.

Given the heuristic insights offered by the descriptive trends of the different academic and professional fields of participants, an interesting direction for future research would be investigating whether and how these different fields actually influence negotiators' behavior and negotiation outcomes, employing a larger and more stratified sample.

Eventually, despite the null results obtained in the endowment task, a direction for future research could be investigating the endowment effect more deeply in interactive environments like negotiation scenarios, exploring both sides of the medal: the rise in rigidity and rejection and the use of endowment effect as a nudge for communication strategy since it operates without individuals perceiving undue influence.

6.11 Conclusion

In conclusion, this thesis has investigated how slight linguistic variations - grounded in the framing effect and in the endowment effect - influence negotiation outcomes. Specifically, it examined their impact on economic performance and subjective perceptions by framing the negotiation proposal in terms of losses versus in terms of gains and presenting a concession as an endowment cue versus presenting a concession as a standard available option, respectively in task 1 and task 2 of the experimental design. Particularly, the most robust finding - the increase in perceived manipulation experienced by negotiators when exposed to loss-framed communication - stimulates researchers to delve deeper into this field and reminds practitioners of the importance of "how" they communicate and not just "what" they communicate. Overall, this result raises important ethical questions that deserve further investigation.

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Appendix A - Experimental Scripts

This first appendix illustrates the set of experimental scripts used in the study, presented according to the subdivision in sequential blocks of the Qualtrics survey. Some textual stimuli were inserted to increase the realism and make participants really feel in the shoes of the negotiator they were interpreting ("is looking at you through the camera"). The survey starts with the first task, composed by an introduction to the negotiation scenario, the two versions of the manipulated condition according to the treatment (gain frame versus loss frame), the choice of the negotiators and the measurement of the subjective evaluations and perceptions (negotiator's satisfaction and perceived manipulation). After a brief shift clarifying that the second task is unrelated from the first one, the endowment task is presented with the same structure. In Appendix B the logic flow of the survey is displayed, while Appendix C presents the variable dictionary of the thesis and Appendix D shows the 27 combinations of payoffs and their resulting joint value.

(Task 1: the framing effect)

Block 1: introduction

Imagine you are John Reynolds. John Reynolds is the manager of Rosa Carter, a popular American singer. Over the past years, she has released several albums and she completed two tours in the US and in Europe. Furthermore, she produced a documentary about her life and career in collaboration with Netflix, which will be released next year.

Now she is writing new songs for her new album. John really cares for Rosa so in managing her career he does not just look for money. John usually negotiates contracts with record labels and music production companies on behalf of Rosa.

He is contacted by a large music production company, which is interested in producing Rosa Carter. Because of distance constraints, he arranges a video meeting on the platform Zoom with a representative of the music production company.

You (John) enter in the video meeting with the representative of the music production company. After a brief presentation, he made a first proposal (which you will have the opportunity to improve by adjusting the terms) pronouncing the words that follow:

Block 2A: Gain frame condition

“We are a very influential company in both America and Europe. Working with us would allow Rosa to grow as an artist, develop fully her potential, and expand her audience globally. With our support, she will strengthen her brand and achieve increasing opportunities for success. Rosa will gain the \$400,000 that we offer as an annual fixed payment. Our offer also includes shared creative freedom, along with the right for us to a 10% revenue share from her documentary.”

Block 2B: Loss frame condition

“We are a very influential company in both America and Europe. Without working with us, Rosa will not grow as an artist, will not fully develop her potential, and will not expand her audience globally. Without our support, she will weaken her brand and miss opportunities for success. Rosa will lose the \$400,000 that we offer as an annual fixed payment. Our offer also includes shared creative freedom, along with the right for us to a 10% revenue share from her documentary.”

[Attention checks]

Block 3: Accept or make a counteroffer?

Now it is up to you, John. The representative is looking at you through the camera waiting for your answer. You:

- Accept the offer
- Reject and make a counteroffer adjusting the terms

(if “reject and make a counteroffer adjusting the terms” is chosen, the following three questions are shown)

Select the amount of fixed payment you are going to propose for your counteroffer.

- \$400,000
- \$700,000
- \$1,000,000

Select the level of creative freedom you are going to propose for your counteroffer.

- Limited
- Shared
- Complete

Select the percentage of the documentary revenue share you are going to propose for your counteroffer.

- 5%
- 10%
- 15%

[Block 3A: The music production company accepts your counteroffer]

[Block 3B: The music production company rejects your counteroffer]

Block 4: Measurement of subjective evaluations and perceptions

Rate the following sentences from 1 (very dissatisfied) to 5 (very satisfied).

“I am satisfied with the negotiation outcome”

“The agreement meets my goal”

“I would accept this outcome again”

Rate the following sentences from 1 (strongly disagree) to 5 (strongly agree).

“The counterparty tried to manipulate my decision”

“The message felt like pressure rather than information”

“The communication felt ethically questionable”

[Block 5 & 6: Manipulation checks A & B]

Block 7: Prior experience

Rate the following sentences from 1 (definitely not) to 5 (definitely yes).

“I have experience in music entertainment”

“I have experience in negotiation field”

Block 8: Shift and introduction to the second task

Now you are going to do a new and different negotiation task, with the same characters but unrelated to the previous one.

(Second task: endowment cue)

Imagine that the roles are switched. Imagine that you are the representative of the music production company interested in Rosa. You have contacted John Reynolds, Rosa's manager. Because of distance constraints, you arrange a video meeting on the platform Zoom.

Block 9A: neutral wording condition

You are inside a Zoom meeting and you are negotiating with John, the manager of Rosa, for a while. The situation seems to be going towards an end and John presents his offer, which includes:

- a fixed payment of \$700,000,
- shared creative freedom,
- the right to a 15% share of the documentary revenue for the production company.

Then John explains that he can also propose another offer, which includes:

- a fixed payment of \$1,000,000,
- complete creative freedom for Rosa,
- the right to a 10% share of the documentary revenue for the production company

- a 3-year music exclusivity clause for the production company.

Block 9B: endowment cue condition

You are inside the Zoom meeting and you are negotiating with John, the manager of Rosa, for a while. The situation seems to be going towards an end and John presents his offer.

The offer includes:

- a fixed annual payment of \$700,000,
- shared creative freedom,
- the right to a 15% share of the documentary revenue for the production company.

Then John states that the company *could be entitled* to a 3-year music exclusivity clause.

John explains that he can also propose another offer, which includes:

- a fixed payment of \$1,000,000,
- complete creative freedom for Rosa
- the right to a 10% revenue share of the documentary revenue for the production company
- a 3-year music exclusivity clause for the production company.

[Attention checks]

Block 10: choice

John is looking at you through the camera, waiting for your decision. What are you going to choose?

- OPTION A: \$700,000 payment, shared creative freedom, 15% revenue share
- OPTION B: \$1,000,000 payment, complete creative freedom, 10% revenue share, 3-year music exclusivity clause

(if “option A” or “option B” is chosen, Block 10B: “the deal is done” is shown)

Block 11: Measurement of subjective evaluations and perceptions

Rate the following sentences from 1 (very dissatisfied) to 5 (very satisfied).

“I am satisfied with the negotiation outcome”

“The agreement meets my goal”

“I would accept this outcome again”

Rate the following sentences from 1 (strongly disagree) to 5 (strongly agree).

“The counterparty tried to manipulate my decision”

“The message felt like pressure rather than information”

“The communication felt ethically questionable”

[Block 12: Manipulation checks]

[Demographics]

[Conclusion]

Appendix B – Survey Flow

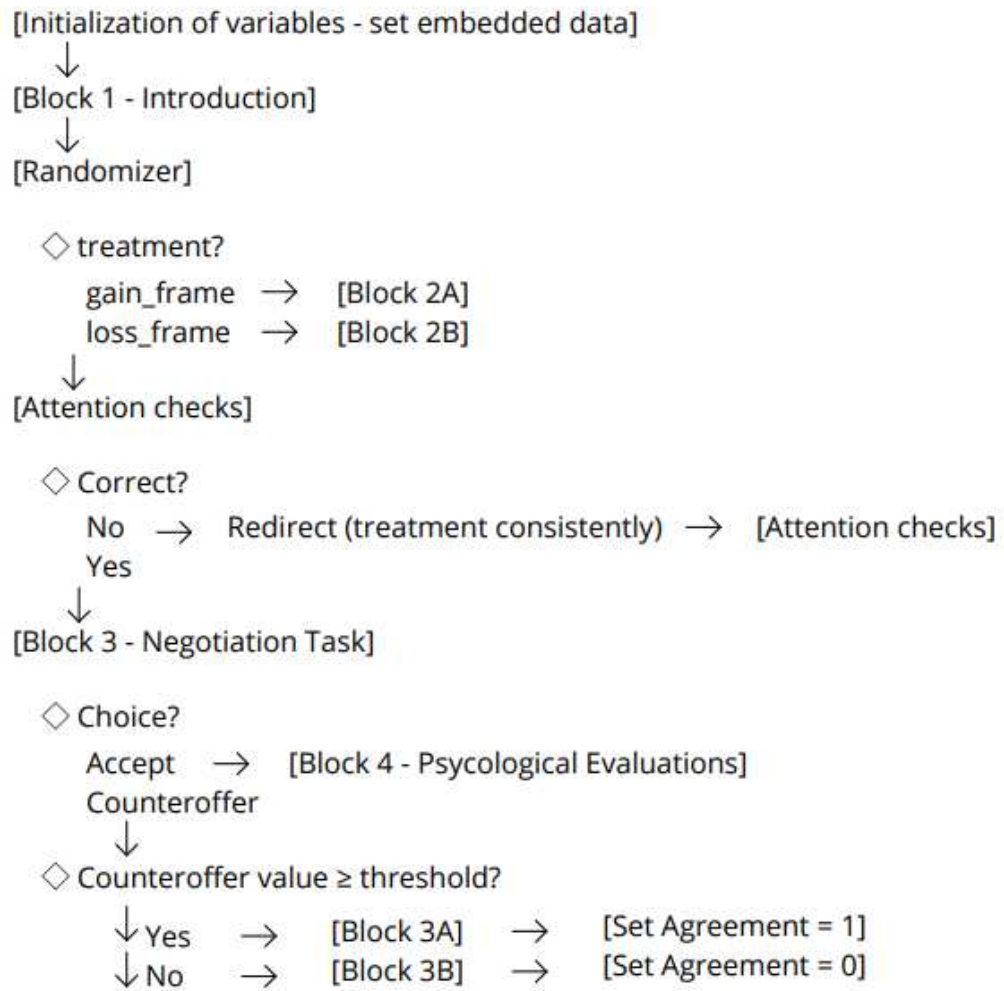
The following diagrams (figure B.1, figure B.2, figure B.3) show the survey flow implemented in Qualtrics for both negotiation tasks. Particularly, the randomization process and the conditional logic are illustrated, as well as the sequential blocks guiding participants through the negotiation scenario. The diagrams were built using Canva.

Figure B.1 starts illustrating the survey flow after participants provided the informed consent: the variables of the experimental set up for task 1 are created with the function embedded data. Then, after being presented to the introductory block, participants are assigned randomly to one of the two conditions, gain frame or loss frame, thus presented to the corresponding block. If participants get the attention checks wrong, they are redirected to the treatment assigned by the randomizer, being presented again with block 2A if assigned to the gain frame condition and to block 2B if assigned to the loss frame condition. After one round (if participants got all the correct answers) or two rounds (if participants didn't get all the correct answers) of attention checks, the block 3 is shown: participants are asked whether they want to accept the offer or reject it and make a counteroffer by adjusting the terms. If they accept the offer, they are directed to block 4 (the negotiation ends and the agreement is recorded as agreement = 1). If participants choose to make a counteroffer, they are asked to adjust the levels for each negotiated issue. Each level corresponds to a payoff (see Chapter 4 section 4.5.2 "payoff table"). If the individual payoff of the counterparty is equal to or greater than the threshold established for the acceptance rule, the counterparty accepts the counteroffer, block 3A is shown and Agreement is set equal to 1 (meaning that agreement is reached). In this case, the joint value, the sum of both parties' payoff, is calculated and if it is equal to or greater than the joint value threshold, the agreement is classified as integrative (integrative agreement is set equal to 1). Taking a step back, if the individual payoff of the counterparty is lower than the threshold established for the acceptance rule, the counterparty rejects the counteroffer, block 3B is shown, Agreement is set equal to 0 (meaning that agreement is not reached) and the outside option is assigned to both parties. After being shown block 3A or block 3B, participants are presented with block 4, measuring psychological evaluations and perceptions and ending the first task with the manipulation checks, and block 7, asking about prior experience in the music or

negotiation field. Regarding the manipulation check, block 5 is presented if the participants were initially assigned to the gain frame condition, while block 6 is presented if participants were assigned to the loss frame condition. The first task ends.

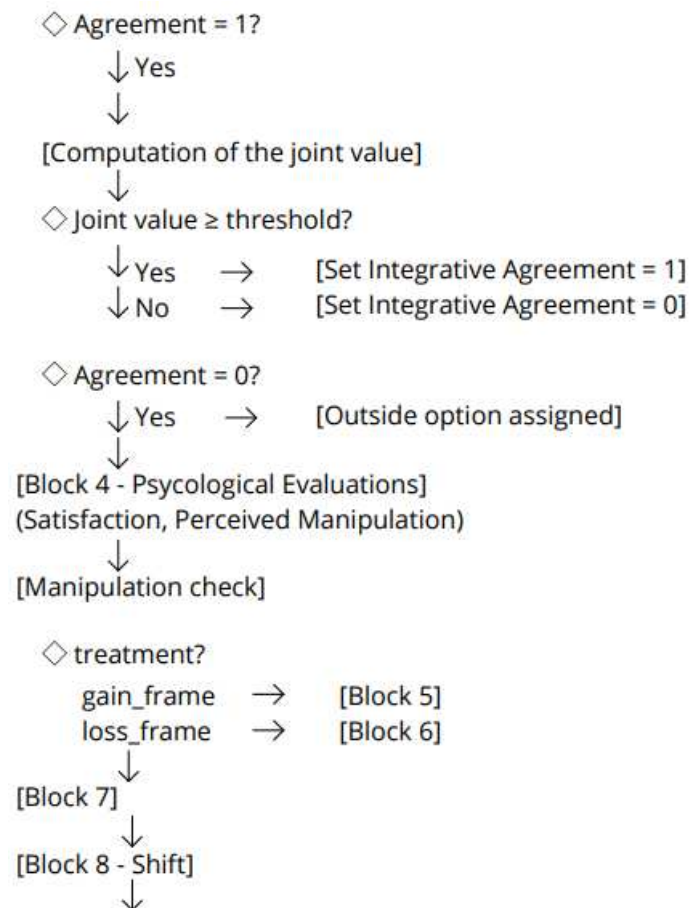
Figure B.3 illustrates the flow of task 2. After a shift separating the task, participants are introduced to the new negotiation scenario (block 8), the new variables for task 2 are set with embedded data and the randomizer assigns participants to the endowment cue condition (block 9B) or the neutral wording condition (block 9A). Then they are asked to complete the attention check and in case of wrong response they are redirected consistently with the treatment initially assigned to. After that, block 10 is shown and participants are asked to choose among option A, option B or reject both offers. If they choose option A or B, block 10B is presented, the agreement is reached ($\text{Agreement2} = 1$) and the joint value is calculated (both options are characterized by a joint value higher than the threshold so if the agreement is reached it is always integrative). If they choose to reject both options, the agreement is not reached ($\text{Agreement2} = 0$) and the outside option is assigned. Then block 11 measures negotiator's satisfaction and perceived manipulation. After the manipulation check for task 2 (block 12), participants are asked demographic questions, followed by the conclusion. At this point, the survey ends.

Figure B.1 - Qualtrics Flow for Task 1 (First Part)



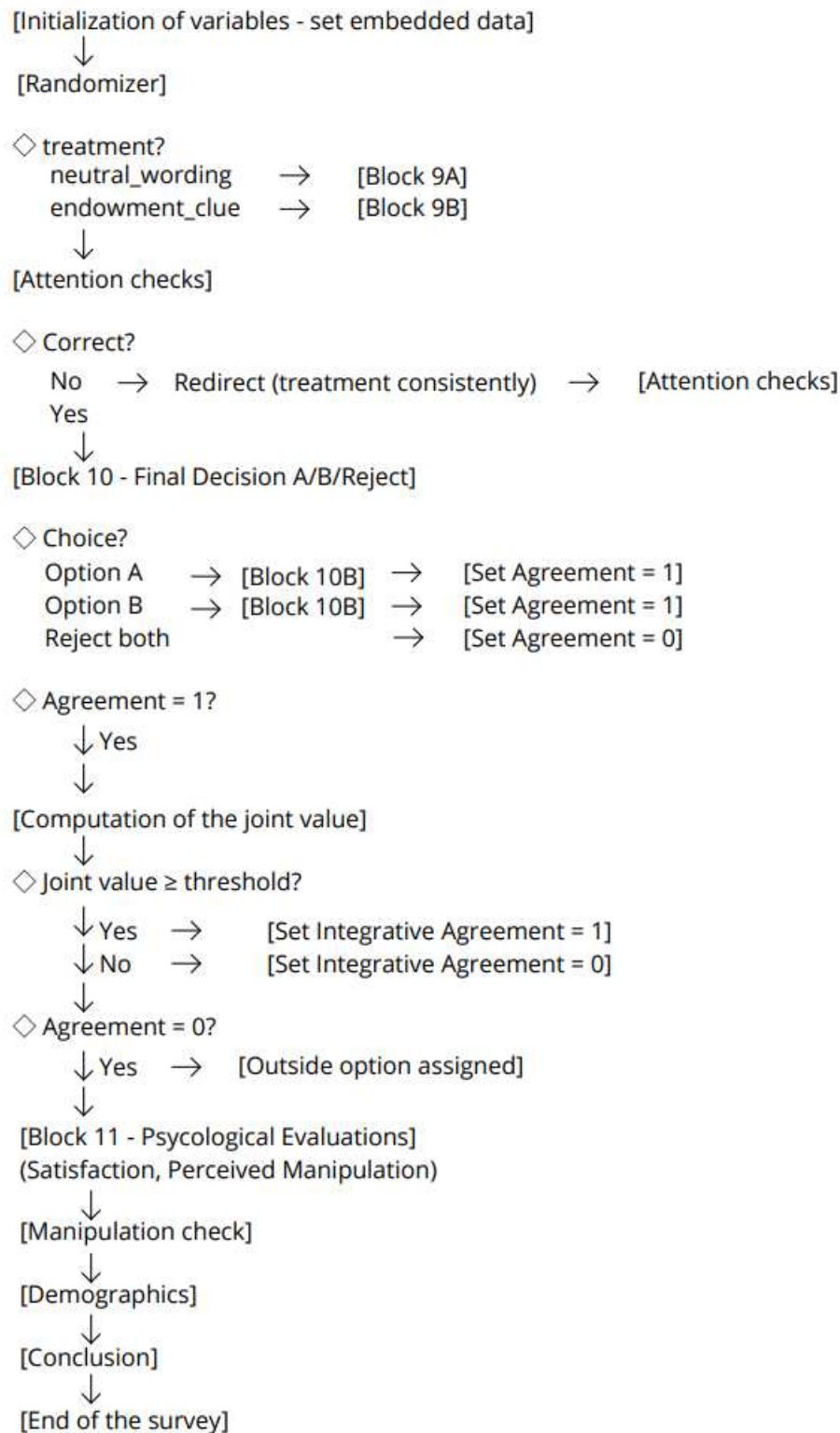
This figure illustrates the first part of the survey flow of task 1, highlighting the randomizer and the conditional logic of the survey. Created by the author.

Figure B.2 - Qualtrics Flow for Task 1 (Second Part)



This figure illustrates the second part of the survey flow of task 1, highlighting the conditional logic of the survey. After the shift, the participant starts the second task, whose logic flow is illustrated in figure B.3. Created by the author.

Figure B.3 - Qualtrics Flow for Task 2



This figure illustrates the survey flow of task 2, highlighting the randomizer and the conditional logic of the survey. Created by the author.

Appendix C – Variable Dictionary

The table below represents a variable dictionary showing the variables integrated in the experimental design. The first column indicates the name of variables, the second column provides a brief description of what is measured by variables and the third column defines the data type. The dependent variables analyzed as negotiation outcomes are highlighted in bold.

Table C.1 - Variable Dictionary

Variable Dictionary		
WHAT IT IS	WHAT IT MEASURES	WHAT TYPE OF DATA IT HAS
E1_treatment	experimental condition assigned randomly to the participant in the framing task (gain vs loss frame)	text/categorical
E1_accept_counter	second round of the framing task	text/categorical
Agreement	1 if agreement is reached; 0 if impasse	binary/numeric
Integrative_agreement	1 if agreement is reached and joint value is equal or greater than 21; 0 otherwise	binary/numeric
joint_value	sum of participant payoff and counterparty payoff for the final accept alternative	numeric
JR_payment	payoff of John and Rosa related to the issue of fixed payment. From the payoff table	numeric
JR_freedom	payoff of John and Rosa related to the issue of creative freedom. From the payoff table	numeric
JR_share	payoff of John and Rosa related to the documentary revenue share. From the payoff table	numeric
MC_payment	payoff of the music production company related to the issue of fixed payment. From the payoff table	numeric
MC_freedom	payoff of the music production company related to the issue of creative freedom. From the payoff	numeric

Variable Dictionary		
	table	
MC_share	payoff of the music production company related to the issue of documentary revenue share. From the payoff table	numeric
MC_value	total payoff of the music production company associated with the counteroffer proposed by John/the participant. It is used to calculate the threshold for acceptance of rejection in the framing task	numeric
E1_satisfaction_1	negotiator's satisfaction measured through a 5-point Likert scale	ordinal
E1_satisfaction_2	negotiator's satisfaction measured through 5-point Likert scale	ordinal
E1_satisfaction_3	negotiator's satisfaction measured through a 5-point Likert scale	ordinal
Satisfaction_Index	mean of the satisfaction items	numeric
E1_perceivedmanipulation_1	perceived manipulation measured through a 5-point Likert scale	ordinal
E1_perceivedmanipulation_2	perceived manipulation measured through a 5-point Likert scale	ordinal
E1_perceivedmanipulation_3	perceived manipulation measured through a 5-point Likert scale	ordinal
Perceived_manipulation_index	mean of perceived manipulation items	numeric
Outside_option	fallback payoff assigned in case of impasse	numeric
participant_id	unique identifier assigned automatically to the participant by Qualtrics	numeric
E2_treatment	experimental condition assigned randomly to the participant in the endowment task (endowment vs neutral wording)	text/categorical
E2_choice	second round of the endowment task	text/categorical
Agreement2	1 if agreement is reached; 0 if impasse (in the endowment task)	binary/numeric

Variable Dictionary		
Integrative_agreement2	1 if agreement is reached; 0 if impasse (in the endowment task)	binary/numeric
joint_value2	sum of participant payoff and counterparty payoff for the final accept alternative (in the endowment task)	numeric
JR_payment2	payoff of John and Rosa related to the issue of fixed payment. From the payoff table (in the endowment task)	numeric
JR_freedom2	payoff of John and Rosa related to the issue of creative freedom. From the payoff table (in the endowment task)	numeric
JR_share2	payoff of John and Rosa related to the documentary revenue share. From the payoff table (in the endowment task)	numeric
MC_payment2	payoff of the music production company related to the issue of fixed payment. From the payoff table (in the endowment task)	numeric
MC_freedom2	payoff of the music production company related to the issue of creative freedom. From the payoff table (in the endowment task)	numeric
MC_share2	payoff of the music production company related to the issue of documentary revenue share. From the payoff table (in the endowment task)	numeric
E2_satisfaction_1	negotiator's satisfaction measured through a 5-point Likert scale (in the endowment task)	ordinal
E2_satisfaction_2	negotiator's satisfaction measured through a 5-point Likert scale (in the endowment task)	ordinal
E2_satisfaction_3	negotiator's satisfaction measured through a 5-point Likert scale (in the endowment task)	ordinal
Satisfaction_Index2	mean of the satisfaction items (in the endowment task)	numeric
E2_perceivedmanipulation_1	perceived manipulation measured	ordinal

Variable Dictionary		
	through a 5-point Likert scale (in the endowment task)	
E2_perceivedmanipulation_ 2	perceived manipulation measured through a 5-point Likert scale (in the endowment task)	ordinal
E2_perceivedmanipulation_ 3	perceived manipulation measured through a 5-point Likert scale (in the endowment task)	ordinal
Perceived_manipulation_index2	mean of perceived manipulation items (in the endowment task)	numeric
Outside_option2	fallback payoff assigned in case of impasse (in the endowment task)	numeric
participant_id	unique identifier assigned automatically to the participant by Qualtrics	numeric

Created by the author.

Appendix D – Payoff Combinations

The table below (table D.1) shows the 27 possible combinations of the three levels of the negotiated issues, indicating the final joint value for each combination. The calculations were run using Excel. Based on the joint value threshold explained in chapter 4 (section 4.5.3), combinations leading to an integrative solution are highlighted in yellow and green. Particularly, the green ones are characterized by the highest joint value. This table shows that integrative solutions are characterized by a joint value equal to or higher than the joint value threshold (21) and a quite fair distribution of gains between parties, as the individual value achieved by the music production company (which is the party asked to accept or reject the counteroffer in the framing task) is equal to or higher than the threshold determined for the acceptance rule (6), explained in the section 4.5.4 of chapter 4. For the payoff table, illustrating the payoff assigned to each level of the negotiated issues, see chapter 4 section 4.5.2.

Table D.1 - Individual Payoff and Joint Value for the 27 Combinations

<i>Fixed payment</i>	<i>Creative freedom</i>	<i>Revenue share</i>	<i>John and Rosa</i>	<i>Music company</i>	<i>Joint value</i>
1M	Complete	5%	16	4	20
1M	Complete	10%	15	6	21
1M	Complete	15%	14	9	23
1M	Shared	5%	13	6	19
1M	Shared	10%	12	8	20
1M	Shared	15%	11	11	22
1M	Limited	5%	10	7	17
1M	Limited	10%	9	9	18
1M	Limited	15%	8	12	20
700K	Complete	5%	14	6	20
700K	Complete	10%	13	8	21
700K	Complete	15%	12	11	23
700K	Shared	5%	11	8	19
700K	Shared	10%	10	10	20
700K	Shared	15%	9	13	22
700K	Limited	5%	8	9	17
700K	Limited	10%	7	11	18
700K	Limited	15%	6	14	20
400K	Complete	5%	12	10	22
400K	Complete	10%	11	10	21
400K	Complete	15%	10	13	23
400K	Shared	5%	9	10	19
400K	Shared	10%	8	12	20
400K	Shared	15%	7	15	22
400K	Limited	5%	6	11	17
400K	Limited	10%	5	13	18
400K	Limited	15%	4	16	20

Combinations leading to an integrative solution are highlighted in yellow and green. Particularly, the green ones are characterized by the highest joint value. Created by the author using Excel.

Appendix E – Non-Parametric Analysis

The Mann-Whitney U test was used to conduct the non-parametric analysis of the subjective outcomes in order to validate the findings obtained with the parametric analysis conducted using OLS regression.

Starting from Task 1, the Mann-Whitney U test showed no difference in Satisfaction Index between treatments ($U = 681.5$, $p = 0.815$), while a significant difference between loss frame condition ($M = 3.67$) and gain frame condition ($M = 2.67$) emerged in Manipulation Index ($U = 364.5$, $p = .0003$). These results confirm the findings obtained by the parametric analysis.

In Task 2 no significant differences between treatments were observed either in Satisfaction Index ($U = 695.5$; $p = 0.991$) or in Manipulation Index ($U = 747.0$; $p = 0.574$).