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HOW SENSE OF POWER SHAPES CONSUMERS' EVALUATIVE JUDGEMENTS AND DECISIONS

PhD Thesis in *Economia e Politiche dei Mercati e delle Imprese*

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Introduction

Power hierarchies and relationships are ubiquitous in the marketplace. Almost never producers and consumers share control equally over the same resources. To the opposite, they are frequently described as two contrasting forces conducting a battle, in which what is at stake – at the end of day – is power. Recent advances in ITC, the burst of information sources, Internet of Things, hypercompetition and the sharing economy are some of the factors that are driving a redistribution of resources among producers and consumers, with the latter gaining increasing power over the latter. Consumers' desires are now driving marketing strategies. Consumer empowerment brings the concept of power back in the spotlight, and increases the efforts of behavioral researchers to understand power as a psychological construct. Sense of power (i.e. subjective power) refers to the perception of power by individuals and it is the most proximate determinant of power-driven psychological functioning and behavior, beyond structural conditions and objective measures of power. Consumers with a high sense of power have increased sensitivity to rewards and inhibited attention to threats. Sense of power promotes single-mindedness in attention and reasoning, and fosters abstract thinking, approach motivation, action orientation, optimism, and a magnified view of the self. Thus, high-power consumers tend to ascribe greater value to their own possessions (vs others'), to switch brand more easily, to engage in cheating behavior and to embrace the risks of their actions. To the contrary, powerless consumers are attracted by high-status products (to satiate their need for power) and are more careful and cautious in information processing and decision-making.

Connecting to previous theories and empirical findings, this work aims at investigating the effects of perceived power on consumers' psychological functioning. By employing different types of experimental designs and instantiating sense of power in participants through conceptual/mindset priming techniques, I

examine how power affects consumers in evaluative and value judgments, and in their behavioral approach. Specifically, the experiments assess differences between powerful and powerless consumers in their ability to resist persuasion, in their tendency to process brand-related information in an unbiased way, and in their willingness to choose products to self-assemble. The empirical insights gained through this investigation urge marketers and practitioners to target powerful consumers and market influentials or to directly empower consumers, in order to assess unbiased consumers' preferences, to facilitate word-of-mouth and referrals, to push self-production practices, customerization, and, ultimately, to effectively pursue value-based differentiation.

CHAPTER 1: Why consumer power?

1.1 Urgency and motivation of the research: consumer empowerment and new market trends

In recent years, technology advances in ITC, such as Internet of Things and 3D manufacturing, as well as the market saturation and the shift from needs to desires, rekindled the academic debate about consumer empowerment (Broniarczyk & Griffin, 2014; Labrecque, vor dem Esche, Mathwick, & Novak, 2013; Wathieu et al., 2002; Wright, Shaw, Newholm, & Dickinson, 2006). The topic of power is back in the spotlight, and many observers have racked their brains in search of the structural factors determining power hierarchies and relationships in the marketplace and potential asymmetries between consumers and producers. Hypercompetition, market saturation, increased availability of information, new opportunities of product acquisition (e.g. sharing economy) are among the main factors driving the consumer empowerment process. First of all, sectors affected by hypercompetition (e.g. high-technology industries), with an overly crowded arena of suppliers, have increased the power of consumers, which benefit from the fact that multiple competitors contend a relatively small market share (Wiggins & Ruefli, 2005). Competing firms, in an effort to conquer market niches, are pushed into differentiating their product offerings and making them more adherent to their target's needs and desires. This results in an obvious increase in the extent of choice on offer within the product categories. Also, since price is one of the lever of positioning strategies, highly competitive markets often end up in advantageous prices for customers.

Another fundamental driver of consumer empowerment is the explosion of information made available by the Internet. Especially online peer-to-peer communication reduces consumers' dependency upon supplier-driven communication and allows for a more rapid spread of information related to products' quality. Consumer has gained more competence and power in discerning the best option among the offers, in specifying her/his preferences and communicating directly with firms. Several indicators reflect this tendency. For example, corporations are more and more driven by market pressures toward actively promoting corporate social responsibility programs (McShane & Sabadoz, 2015). With such programs, firms try to be genuinely proactive and to incorporate environmental and social concerns along with profit seeking into their behavior. To make matters worse, these programs are constantly put through their paces by consumers' skepticism and each smear in the sustainability narration of a firm is potentially charged of greenwashing (Marquis, Toffel, & Zhou, 2016).

Consumers have also many more opportunities to go after their ongoing quest for authenticity¹ in marketplace (Grayson & Martinec, 2004), since they can better assess the authenticity of products through the sharing of information with peers and can also reach these products more easily than in the past. Through word-of-mouth communication, consumers have become increasingly able to assess the quality of products and to detect flaws and counterfeits. This also translates into a higher perceived quality expectation threshold: consumers are less willing to settle for products inferior to their expectations (Pires, Stanton, & Rita, 2006).

Consumers' enhanced discernment ability is reflected in further pushes to differentiation by firms, that spasmodically attempt to understand consumers' needs, in an effort to beat competitors and earn their market share.

¹ The authenticity of products can have a double valence. Indeed, we can talk about an authentic product in the sense of the original author-made object (as opposed to a spurious copy). However, saying that a product is authentic might indicate that the product has been made while observing a standard/traditional production procedure, regardless of who has realized the product.

The empowerment process boosts consumers' control on both types of authenticity.

In this context, the detailed versioning of the product offering represents a fine knit sieve, indispensable to intercepting the nuanced desires of a firm's target customers. However, companies cannot just restrict themselves to continuously update their product offering. Adherence to the most specific desires of consumers dictates to the firms unprecedented efforts in customization strategies, both on the operational and on the marketing side, ultimately resulting in complete customerization² (Wind & Rangaswamy, 2001). Meeting and adapting to consumers' requirements implies that firms aim at involving the customers in value creation. Indeed, co-creation has the double advantage to enhance the correspondence between consumers' values and the productive and symbolic apparatus of companies, and to increase consumers' trust and fidelization. The consumer becomes a prosumer (Cova & Cova, 2012; Ritzer & Jurgenson, 2010; Toffler, 1980), that is a subject directly involved in producing what she consumes, and in co-creating value. Redefining the reciprocal roles of producers and customers – previously so strictly defined – means also dismantling brokerage positions and questioning solidified power relations. Furthermore, the level of involvement of customers in value co-creation can vary, with greater involvement obviously triggering greater consumer empowerment. Direct engagement of consumers spans activities like filling the tank of one's own car, composing one's own menu at McDonald, or online user-generated content. The most blatant and extreme examples of consumers leaping over in the side of production are self-production practices. When a consumer directly prepares cookies starting from branded ingredients to share them with friends, or when a homemaker decides to produce her make-up herself, we are facing hybrid forms of consumers-producers, that firms have sometimes to consider as real competitors. Self-production practices also represent additional opportunities to obtain consumption objects, and so they further enrich the

² Customerization refers to something different from customization. Mass customization is a procedure to optimize productive resources in order to adapt a product format to different customers. This strategy mainly involves exploiting the modularity of standardized components – which can be assembled in different configurations – and, more generally, the flexibility of productive processes. The customers are almost never involved in designing the product offering: they are offered a certain level of personalization in choosing among some variants of the components of the basic product. Customerization combines the operational flexibility typical of mass customization, with the communicational flexibility of one-to-one marketing. In this case, the offer is completely tailored on the basis of needs and desires of the customer.

already numerous acquisition channels available to contemporary consumers. Standard purchasing is just one of the available possibilities, next to which there are several new tools, such as peer-to-peer, group buying, renting, sharing, as well as held extinct practices, such as gift giving, bartering, borrowing. Hence, consumers can experience products without necessarily buying them, and they can wander among brands and employ them in creative and unusual ways. Exchanges of roles and encroaches on territory are increasingly frequent, testifying the fluidity of power relationships between the two sides of the marketplace. More generally, consumers have become more powerful in fulfilling their specific needs and desires, accordingly to their tastes.

The other side of the coin is represented by the possible drawbacks of this seemingly relentless rise in consumer power. Quality assessments can become difficult if not impossible when the amount of information overcomes people's possibility of processing it (Broniarczyk & Griffin, 2014). Choice freedom can also lead to suboptimal decisions, especially because of heuristics employed to simplify the decision process.

Even prosumerism and self-production are not exempt of grey faces. According to several critics, prosumer is a sweetened label for not payed worker (Dujarier, 2016). Far from being the new frontier of freedom for consumers, self-production could be the new-millennium face of work exploitation, relieving companies from moral and legal obligations towards those that are to all effects workers.

Without considering that user-generated contents are most of the times supported, rather than hindered, by firms, since they represent an enormous stock of very detailed information about customers. Indeed the same platforms (and social media in particular) that allow consumer-to-consumer communication to take place, are (more or less overtly) picked up by the companies' aerals to gain a deeper knowledge and profiling of their customers.

In addition, one could question whether empowered consumers are truly more able to negotiate, on average, more favourable prices than in the past, at the same quality. Or, also, if they are really compelling

companies to increase the quality standards of their products and services. Indeed, the improved ability of firms to auscultate the market increases their chances to effectively differentiate their product offering from that of the competitors, and to realize a monopoly for their particular format in their specific market niche. Within such monopoly, firms can, to some extent, arbitrarily decide prices and obscure quality assessments behind the curtain of brand-related symbols.

However, whether the empowerment process is real and unconstrained, or mitigated by drawbacks and companies' counteractions, it has brought new interest toward the construct of power and how it is negotiated between consumers and companies, at the same time blurring the boundaries between these two counterparts. Indeed, different streams in marketing management studies, such as service dominant logic (Harrison & Waite, 2015; Vargo & Lusch, 2004) and relationship marketing (Grönroos, 1994; van Noort & Willemsen, 2012), acknowledge this increasing and overwhelming empowering process and suggest that it is not a process to be opposed to; rather it seems beneficial for firms to shift toward more inclusive management practices.

The historical events just described get the credit to highlight the importance of the concept of power, and its displacement within society. As a matter of fact, this topic can be tackled from different perspectives. As we have seen, research on the empowerment process has mainly investigated the determinants of the configuration of power and its allocation between producers and consumers. Moreover, the investigators of the empowerment process are mainly focused on objective power gained by consumers after the radical shifts in the allocation of resources (especially informational resources) between producers and consumers. This is not the only way to tackle this topic though. Deeply understanding power dynamics involves first and foremost an examination of how much and what type of power consumers perceive to have. This means shifting the focus from objective power to subjective power, i.e. sense of power.

Therefore, the present work aims specifically at investigating consumers' sense of power and its effects on consumers' attitudes, value judgements and behavior. In order to account for the psychological functioning of empowered consumers, this investigation focuses on the missing link between powerful positions and

psychological downstream consequences. It is perceived power that mediates – either consciously or unconsciously – the effects of structural/objective power on affect, cognition, and behaviour. In addition, this work is not so much concerned with the antecedents of power, but rather with the psychological consequences of sense of power. In line with other streams in marketing research, i.e. consumer behaviour and consumer decision making (Galinsky, Gruenfeld, & Magee, 2003; Rucker, Dubois, & Galinsky, 2011; Rucker, Galinsky, & Dubois, 2012), I tackle the topic of power by focussing on the self-perception of power by individuals and how it affects behaviour. Rather than studying the structural properties of relationships that affect power, I look at power from the point of view of the individual, examining the perception of power, which, at the end of the day, is all that matters.

1.2 Problem identification and statement

The depicted trends outline the necessity to analyse how sense of power shapes consumer behaviour. Indeed, it is important to distinguish between the empowerment process and the sense of power, which is the psychological status (Galinsky et al., 2003) that might result from that process. In a sense, the empowerment process, being inextricably bounded to present production and technology conditions, is an historical phenomenon, which is unlikely to reproduce in the exact same form in the future. Instead, studying the perception of power by individuals allows for a comprehension of human psyche, beyond historical and contingent considerations.

While power is often conceived as a structural variable (Ng, 1980), it can also be thought of as an individual property, deriving from the self-perception of having power. Such a perception implies a configuration of tendencies in affect, cognition and behavior domains (Keltner, Young, Heerey, Oemig, & Monarch, 1998). Aside from the structural and hierarchical position held by an individual, that might indicate its objective power, the subjective perception of power by this same individual has distinct cognitive and behavioral

consequences. In addition, also a structural powerful position will affect the individual's cognitive-behavioral profile only to the extent that the individual perceives herself – consciously or unconsciously – as powerful (P. K. Smith & Galinsky, 2010). In other words, the effects of objective power are always mediated by sense of power, which, to this respect, is the more proximal antecedent of power-driven psychological functioning. As an additional proof of the previous statement, note that the real base (i.e., objective conditions) of sense of power might not always be present and that there are instances of disjunction between actual and perceived power. For example, there are parents that, rather than confidently exercising their obvious position of much greater control (affectively, cognitively, physically and financially), are instead completely helpless in front of their capricious four-year old kid. Alternatively, think to a manager that is made to feel powerless when she perceives her employees as having competencies that she does not have. At the same time, even the most destitute of the workers can feel confident about her ability to influence others or to stand on her own two feet and reach whatever goal if desired. In addition, it has been found that people are used to report self-perceptions of power very frequently in their daily life, irrespective of whether they truly held power positions or not (P. K. Smith & Hofmann, 2016). Thus, the focus of the present work is the psychological perception of power, i.e. sense of power, by consumers.

Investigating the effect of power on consumer behavior can provide great insights on the way in which consumer's judgments are shaped and decisions are made. In particular, this work aims at grasping a deeper understanding of how sense of power affects consumers' judgments and decisions. I investigated how feelings of power promote certain tendencies in consumer evaluation and decision-making, namely the resistance to induced compliance, the predecisional distortion of information and the propensity to self-assemble products.

The remaining of the work is organized as follows (*Table 1*). In the next chapter, I attempt to formulate a comprehensive definition of power, analyze the key components of the construct, describe the main operationalization methods of the construct, and outline some of the cognitive and behavioral

consequences of power investigated by previous literature. In the third chapter, three experiments on the effects of power in the consumer domain are reported, together with managerial implications. The fourth chapter is devoted to the general discussion of the empirical results, limitations, and conclusive remarks.

Table 1 – Structure of the text

Chapter 2		Chapter 3	Chapter 4	
Sense of power		Empirical studies	General discussion	Limitations & future research
Definition & Operationalization	Effects on	effects of sense of power in the consumption domain		
	<i>Basic cognition</i>			
	<i>Evaluative judgments (Attitudes)</i>	Experiment 1: <i>Power → induced-compliance to controversial statements</i>		
	<i>Value judgments</i>	Experiment 2: <i>Power → pre-decisional distortion of information</i>		
	<i>Decision-Making</i>			
	<i>Behavior</i>	Experiment 3: <i>Power → willingness to self-assemble a purchased product</i>		
	<i>Motivation</i>			

CHAPTER 2: What sense of power is about

2.1 Definition of sense of power

Power is defined as asymmetric control over valued resources, own and others (Dépret & Fiske, 1993; Galinsky et al., 2003). As such, a powerful individual is able to provide or withhold substantially more resources than her powerless counterpart is (Anderson & Berdahl, 2002). Providing resources is equivalent to rewarding others, while withholding resources is equivalent to punishing others. It is essential that these resources are valued to at least one of the parties at stake, in the sense that the parties are dependent on such resources to reach their own outcomes. Not only can resources be material (food, money, opportunities, physical integrity, health, etc.) but also immaterial (knowledge, affection, opinions, values, social relationships, etc.). An individual who controls resources valued by others is able to regulate the others' behavior by adjusting the level of resources provided to others. As a result, the powerful has the capacity to modify others' states, while at the same time remaining unmodified in her own states (Keltner, Gruenfeld, & Anderson, 2003). To complement this definition, we can say that the powerful, by virtue of her disposal of resources, can direct others toward states advantageous to herself. For example, imagine a standard training session involving a football player and his coach. The latter will have extended power since he can provide his trainee with precious advices, severe reprimand, promotions to higher team positions or downgrades, inclusion or exclusion in an important match. The player, to the opposite, ought not to be able to coerce his coach to the same degree, although some might argue that star players are sometimes more powerful than their coaches since they can leverage the fact that they cannot be easily replaced. Therefore, the power held by the coach toward his trainee is a function of the relative control he

has, compared to the player, over valued resources. In this vein, sense of power is the perception of control over valued resources that individuals have.

All the relationships include power differentials and this happens at all levels of the social structure (A. Guinote, 2007a). In fact, power differentials constitute the basis of dyads, (e.g., two friends), small informal groups (e.g. families), medium sized groups (e.g. companies), and big groups (e.g. relationships between nations).

Furthermore, power is situational, in the sense that it depends on the context in which the relationships evolve (Anderson, John, & Keltner, 2012). This means that the same person can be powerful in a certain group, and at the same time completely powerless in another. Not only that, but also within the same group, a single person can feel powerful with regard to certain topics (for which she feels to control greater resources), but can lack power in dealing with topics, actions or goals for which she does not control the necessary resources. However, this does not mean that there are not more generalized or chronic forms of power, that involve perceiving asymmetrical control over resources spanning over more than one setting or group, or even independently of specific contexts. In the latter case, it is more appropriate to talk about a disposition to sense of power, an individual regularity – in the form of a real personality trait – determining a highly generalized and stable perception of power, regardless of the actual afforded power (Anderson et al., 2012).

On closer inspection, the previous definition includes two varieties of power (and of their corresponding psychological versions): one is power derived from control over others' resources, while the other one is power resulting from controlling one's own resources, freed of external conditioning (Lammers, Stoker, Rink, & Galinsky, 2016; Leach, Weick, & Lammers, 2017). Therefore, the subjective perception of power has to be distinguished in social power and personal power (Overbeck & Park, 2001). This distinction is somehow overlapping with that between 'power over' and 'power to' (Pansardi, 2012). Social power attains strictly to the asymmetric control over others' valued resources (Magee & Galinsky, 2008). The asymmetry in control determines the dependency of one party upon the other. In addition, the resource

must be valued, objectively or subjectively, to at least one of the two parties. The powerful can administer rewards and impose punishments, due to its ability to control valued resources. Controlling others' valued resources means controlling the resources that enable other individuals to reach their own desired goals. Social power can be conceptualized as "power over" (Thibaut & Kelley, 1959), the ability to make others do what you want them to do. Social power is made of the internal representations held by individuals about their power relative to others. These perceptions concern one's ability to influence others (Anderson et al., 2012)³. A supervisor in a firm would probably have a relatively high social sense of power. By virtue of her role, she can evaluate employees and provide them with stringent guidelines. She should also be able to condemn inappropriate behaviors and promote the ones she believes to be correct. All these prerogatives would probably give her the perception of having a great deal of influence on her subordinates.

On the other hand, personal power involves one's ability to act for oneself, with agency. As such, personal power is a more general concept – the "power to" – similar to the definition of Weber (1946) of power as simply the "production of intended effects". Personal power involves control over one's own access to resources and therefore involves lack of dependence on others (Galinsky, Rucker, & Magee, 2015). To stick to the working example, you could think of the freelance advertiser as an example of an individual most likely equipped with high personal sense of power. Even if she does not have subordinates directly answerable to her, she will feel free to filter the commissions she likes and that can provide her the highest payoffs. Once she accepts a job, she is free to implement the advertising techniques that she believes the most effective in reaching the goal planned with her client. So, she perceives high autonomy from external conditionings in seeking jobs that promote self-realization. Contemporarily, she should have also some degree of control about the fact that the actions she initiates lead systematically to the desired goal, and so that her intervention is crucial for reaching a certain outcome.

³ Anderson et al. (2012) use the expression "personal sense of power" to refer to subjective representations of power as opposed to objective/structural power positions. The adjective "personal" has nothing to do with what is meant in the present work. In fact, quite to the opposite, the notion of power presented by Anderson et al. (2012) is the equivalent of 'social power' the way that this concept has been defined in the present work.

2.1.1 The key components of power beliefs

As we saw, sense of power involves the perception of controlling valued resources. Now, what are the key beliefs implied by sense of power? Does sense of power involve a peculiar configuration of beliefs concerning the means available to the actor and the outcomes that are eventually reachable? Does sense of power concern also the perception of being able to initiate an action? What are the key beliefs held by the powerful person? Asymmetrical control over valued resources (the definition of power) entails a specific pattern of control⁴ and autonomy beliefs. In addition, this pattern differs to some extent between social and personal power.

⁴ In the context of a task (or more generally an action), control refers to the ability of an agent (typically the self) to act in such a way that a given outcome is reached. In fact, control efforts involve three entities: agents, means and ends (Flammer, 1995; Skinner, 1996; Weisz, 1986; Zimmerman & Schunk, 2006). “Ends are the desired or undesired outcomes over which control is exerted, agents refer to the individuals or groups who exert control, and means refer to the pathways through which control is exerted” (p. 552). So, (objective) control spans over means-ends relations, agent-means relations and agent-ends relations. Subjective beliefs can be formed about each of these dyadic relationships between instantiations of agents, means and ends. The complexity of the connections relevant to the concept of control is testified by the plethora of constructs that are somehow related to it, such as *sense of control*, *actual control*, *personal control*, *behavioral control*, *locus of control*, *helplessness*, *contingency*, *competence*, *self-efficacy*, *decisional control*, *predictive control*, *informational control*, *illusory control*, *responsibility*, *blame*, and *proxy control*. A single control belief can refer to more than a relationship (e.g. a composite belief concerning the connection between the agent A and the means A, and the connection between the agent A and the means B; or a belief stating a link between agent A and means A, and between agent A and end A). Thus, subjective control is the subjective representation of one’s capability to exercise control (Ajzen, 1991; Flammer, 1995; Rothbaum, Weisz, & Snyder, 1982; Skinner, 1996; Skinner, Chapman, & Baltes, 1988). Acknowledging the difference between objective and subjective control is important because even an objective gain or decrease of control “will only have psychological significance if the person recognizes (accurately or inaccurately) the gain or loss” (Langer, 1979, p. 306).

In addition, there is a thin layer separating objective from subjective control. Control-related data coming from reality and the environment need to pass through the filter of human lens to be converted into control beliefs. This interface between objective control conditions and subjective control is made up of the strategies that individuals use to select and integrate the raw data about actual control conditions and transform them into the internal beliefs they held. This interface between reality and internal states has been also defined as “experiences of control” (Skinner, 1996) or “subjective control experiences” (Skinner, 1985). This name is due to the fact that people mainly infer the control they are in charge of through the control actions (experiences) they have attempted in the past. Indeed, experiences of control (Skinner, 1996) are defined as “the cumulation of action-outcome episodes that accrue from an individual’s actions in a set of objective control conditions that the individual interprets according to his or her subjective control beliefs” (p. 560).

Since subjective beliefs can result either from interpersonal or intrapersonal attributions⁵, it is important to emphasize that hereinafter we will be concerned only with self-perceptions (i.e. intrapersonal attributions) of control and autonomy.

First of all, by definition, sense of power entails the perception to control some means to reach specific outcomes. In fact, the resources constituting the basis of every kind of power are means to reach certain goals. Therefore, sense of power does not necessarily include the self-perception of competence (that concerns possessing and controlling knowledges and abilities, and having certain actions within one's own repertoire). It includes instead, more generically, capacity beliefs⁶ (Skinner, Wellborn, & Connell, 1990), i.e. notions concerning the access to given resources (money, an intimate relationship with a celebrity, etc.). Ironically, one's sense of power could be founded upon believing to have a privileged access to luck, intended as a *pass-partout* to the satisfaction of every desire.

This core belief about capacity is embedded in both personal and social power. In the former case the individual control resources beneficial to her own objectives, while in the latter case she control resources instrumental to other people's objectives. Moreover, as for social power, the capacity belief could ingenerate cascading capacity beliefs concerning domains (i.e. resource) different from those on which power was used initially. For example, a secret agent possessing confidential and obscene information about a politician may use these information to extort money from the politician, in return for her own silence. Thus, the power-holder has capacity beliefs extended to all the domains that she has been able to

⁵ People have beliefs both concerning others' perceived control or autonomy, and about their own level of control or autonomy. An individual A (the observer) can make interpersonal attributions and so form belief concerning other people (how much control/autonomy does individual B or C have?), or she can self-perceive (intrapersonal attributions) and so form beliefs concerning the self (how much control/autonomy does the self/individual A have?). In inferring the control held by a target (the center of attribution), the observer A can compare the target with other agents (among which there could be the self too) and assess who – the target or other agents – is better able to access a given means (agent-means beliefs), or can more easily reach a given outcome (agent-ends beliefs), or belong to the class designated to undertake the actions connected with certain outcomes.

⁶ Here I refer to perception of control concerning the relationship between the agent (the self, in this case) and the means (in this instance, resources available to the agent). These capacity beliefs do not include the evaluation of reachable ends given those means. Indeed, the ends are considered in other types of control beliefs (see further within the text).

connect in her mind with the resources she controls. In essence, this is a form of proxy control (Bandura, 1986) or participatory control (Reid, 1984), determined by the power-holder's awareness to be able to barter her valued resources for the other's "benevolence"⁷.

All power-holders are endowed with at least a certain amount of contingency beliefs⁸ (Abramson & Alloy, 1980; Alloy & Abramson, 1979; Weisz, 1986; Weisz & Stipek, 1982). That is, they believe that there is at least one resource that causally determines a given outcome (regardless of whether this outcome benefits the self or others). In fact, one of the conditions of power is precisely that the controlled resources⁹ are valued to someone, and so are instrumental to reach something.

⁷ Although the most investigated agent is the self, there are also alternative agents that can be considered, such as a proxy agent, a participatory agent, a collective agent (i.e. a collectivistic aggregate), or an impersonal agent (e.g. the environment, the context, the situation, the winds of change, ecc.). Traditionally, when the subject perceives control as being in others' hands, these different agents are referred to as 'powerful others' (Levenson, 1974). When these 'external' agents act on behalf of the individual, they represent a sort of proxy or participatory agent. A proxy agent is one that is designated to act on behalf of the self. Think of a doctor charged of her patient's health. A participatory agent is one that acts in collaboration with the self for a given goal and is responsive to the self. Although it was initially assumed that beliefs in powerful others would interfere with a sense of personal control (Burger, 1989), this has not been found to be always the case. If external agents have legitimate authority, act on the individual's behalf, and are responsive to the self, they can be seen as benevolent sources of control that augment the power of the self (Antonovsky, 1979). Furthermore, important to the present dissertation is that this kind of benevolent external control can be "bought" via the resources that one has access to.

⁸ Contingency beliefs are a type of control beliefs concerning means-ends relations, that is the link between potential causes and outcomes (desired or undesired). Beliefs about means-ends relations refer to which cause is associated with which effect. They specify which causes can achieve success and which are doomed to failure.

⁹ Resources (material or not) constitute just one type of causes of intended outcomes. But there can be other causes (i.e. means) of given ends. Along with resources, causes can be actions (either behavioral or cognitive) implemented by a given agent (behaviors, responses, efforts, habits, accidents, thoughts, evaluations, etc.), attributes of the agent (e.g. ability, personality, attractiveness, or generic makeup), and/or they can be part of the residual category of unknown causes (e.g., luck, fate, destiny, chaos, chance, no cause, etc.).

We could isolate a series of dimensions underlying the different kinds of means and qualifying them in various ways. Indeed, the means differ as for controllability, stability, mutability (i.e., fixed vs. mutable), intentionality, global vs. specific, contingent vs. not contingent, internal (self-related) vs. external (not self-related), benevolent vs. malevolent. For instance, the opposition between internal and external means refers to efforts implemented either by the self or by others, human or not-human (e.g. powerful others, the law of God, etc.) Many researchers assume that these dimensions are orthogonal to each other: for example, external causes are not necessarily uncontrollable, since they can be controlled by powerful others (Skinner, 1996). In addition, quite interestingly, people's beliefs about the effectiveness of causes constituting opposite poles of one dimension have not been found to be mutually exclusive (Skinner, 1996). For example even if people believe in the effectiveness of internal causes (e.g. their own efforts), this does not exclude their belief in the effectiveness of powerful others' efforts. Similarly, trusting the effectiveness of non-intentional means (e.g. physical features) can co-exist with the trust in the effectiveness of intentional means (e.g. actions pursuing a goal). Therefore, these beliefs do not form a singular bipolar dimension, rather they constitute separate orthogonal dimensions.

As the capacity beliefs, also contingency beliefs derive from both personal and social power. People high in personal power have contingency beliefs linking means and desired ends, whilst individual with high social power have contingency beliefs concerning means that can reach ends desired by others. In addition, high social power individuals also have contingency beliefs concerning how controlled resources causally determine – through proxy control – the goals desired by themselves. In fact, the ends evaluated in means-ends beliefs can differ as for their proximity with a meaningful means: therefore, the ends can also consist of the indirect consequences that the means results in.

Not only are desired ends contingent on valued resources. Since the resources themselves are controlled by the powerful individual, this will perceive her own ends as contingent on her own intervention, more than she perceives them as contingent on others' interventions or on chance. For these reasons, powerful individuals also have an internal locus of control (Caliendo, Cobb-Clark, & Uhlendorff, 2015; Rotter, 1966), even if this perception is not necessarily extended to all the domains. However, their internal locus of control at least spans over those objectives enabled by the availability of valued resources. In other words, the power-holder is confident that some of the actions she can do on the resources will produce a given end: if there is no action on resources, neither the goal can be reached.

The formation of these contingency beliefs can happen through different strategies of selection and integration of the data from reality. Objective contingency conditions result from the difference between the conditional probability of a specific outcome given an action ($P(O|A)$), and the conditional probability of that outcome given the absence of the action ($P(O|\neg A)$) (Alloy & Abramson, 1979; Moore, Lagnado, Deal, & Haggard, 2009). So,

$$\text{objective contingency} = P(O|A) - P(O|\neg A)$$

Transforming objective contingency conditions in subjective control beliefs is the domain of causal judgements (Crocker, 1981; Samland, Josephs, Waldmann, & Rakoczy, 2016), namely the strategies people employ to evaluate causal information and advance hypotheses about outcomes¹⁰.

For example, in evaluating if her friend smiling at her is caused by her giving money to her friend, a subject is confronted with a four cells matrix (*Table 2*) representing the conjoint frequencies between the action and the outcome (Skinner, 1985).

Table 2 – “Is my giving him money causing my friend smiling at me?”

	<i>Smile (O)</i>	<i>No smile (!O)</i>
<i>Giving him money (A)</i>	a. $f(A \cap O)$	b. $f(A \cap !O)$
<i>Not giving him money (!A)</i>	c. $f(!A \cap O)$	d. $f(!A \cap !O)$

The subject can adopt multiple strategies to integrate this information and form a causal relationship between the action and the outcome. She could, for example, adopt the *Cell A strategy* basing her evaluation solely on the positive confirming case “I gave him money and my friend smiled”. The more objective confirming cases happen, the more the subject can observe them, the more control is inferred from these cases. This evaluation strategy completely disregards disconfirming cases or negative confirming cases, even if they effectively happened. Another applicable rule, called the *A versus B strategy*, would be to consider how greater the cell A – the confirming positive case – is compared with the Cell B – the disconfirming case. The greater the difference, the greater the control beliefs will be. In the *comparison-of-the-diagonals-strategy* the amount of control present is inferred by evaluating how much the sum of Cell A and D exceeds the sum of Cell B and C. However, the more complete rule is the *conditional-probability strategy*, with which the person evaluates the difference between $P(O|A)$ and $P(O|!A)$. This strategy

¹⁰ Experiences of control designate the individual-based rule that presides over the selection and integration of those aspects of the real base of control that are relevant for subjective perceptions of control. As such, experiences of control are the most proximal determinants of control beliefs (Skinner, 1985).

summarizes as confirming cases the probability that the outcome occurs when the action occurs too, and as disconfirming cases the probability that the outcome does not occur in absence of the action. Among the depicted rules to obtain the subjective control, only the conditional-probability strategy transparently resembles the structural properties of the objective control conditions. In all the other cases, the subject who uses those strategies will be simplifying the information available, obtaining contingency beliefs with different degree of accuracy.

Therefore, in inferring whether money warrant others' approval, the subjects may employ different judgemental strategies. As we saw, contingency of certain results (e.g. social approval) given certain resources (e.g. money) is a pre-condition for the formation of sense of power. However, one relevant empirical question is left: does huge availability of resources influence an individual's propensity to adopt judgement strategies that maximize her subjective control inferred from real situations?

Beyond specific capacity and contingency beliefs, sense of power also implies agents-ends beliefs. Agent-ends relations concern the connection between an individual or a group and possible outcomes (Skinner, Chapman, & Baltes, 1988). These connections between people and outcomes prescribe the prototypical definitions of control. In general, control refers to the extent to which an agent can intentionally produce desired outcomes and prevent undesired outcomes (Skinner et al., 1988). When individuals believe they can do this, they are said to have personal control, perceived control, or a sense of control. These beliefs are also labeled expectancies of success or outcome estimates.

Given this definition, one could argue that these kind of beliefs about agent-ends relationships are redundant, since they can be completely reduced to some combination of agent-means and means-ends relationships. Indeed, common sense would dictate that the statement 'the agent A can obtain the outcome Y' (agent-ends relationships) is perfectly deducible from the conjunction between the statement "There exists means X that produces Y" (means-end relationships) and the statement "Agent A has or can obtain means X" (agent-means relationships). However, we should always keep in mind that what we are talking about here is not simply propositions about the connections between the constituents of the

agentic situation, but rather propositions about the subjective beliefs regarding these same connections. Strictly speaking, we are interested in statements of the form “I believe that the agent A can obtain the outcome Y” (agent-ends beliefs), “I believe that there exists means X that produces Y” (means-end beliefs) and “I believe that agent A has or can obtain means X” (agents-means beliefs). Therefore, the semantic relationships among the propositional attitudes we are talking about do not mirror the semantic relationships among the nude propositions. In other words, the isomorphism between agent-ends beliefs and different combinations of agent-means and means-end beliefs is an empirical question, that cannot be assumed *a priori* and in each and every situation. For example, people may expect that they can, to some extent, reach a given outcome, but they may be unaware of the specific means to employ to fulfil the task. They could simply believe that they can implement some sort of strategy that leads to the desired end, without worrying to identifying precisely what should be done. Moreover, beliefs about different connections can serve different psychological functions, and in this case, it is unlikely they are coherently organized from a semantic point of view. For example, agents-end beliefs might serve to protect the ego (Abramson & Alloy, 1980), while means-end beliefs attend to provide potentially effective strategies (Connell, 1985). In addition, the action sequence usually dictates different beliefs to be formed depending on different stages (Kuhl, 1984). People may commit to a result by using global assessments of control, and may employ specific contingency (means-end) beliefs to identify an effective action plan.

Since values resources are like keys to access even indirect goals, the powerful has a great outcome control, also beyond her awareness of the concrete means she will adopt to reach those goals (Fiske & Berdahl, 2007).

Finally, beyond control beliefs, sense of power embeds also perceived autonomy¹¹ (DeCharms, 1968; Heider, 1958; Ryan & Deci, 2006). Perceived autonomy has already been conceptualized as self-

¹¹ Perceived autonomy is studied in psychology especially with regard to its motivational component: autonomy is viewed as a fundamental human psychological need, that entails to be satisfied in order to provide individual with

determination (deCharms, 1981; Deci & Ryan, 1985a) and “refers to the experience of freedom in initiating one’s behavior” (Deci & Ryan, 1985a, p. 31). It is orthogonal to control beliefs, as the latter refer to presumed contingency in action or to the availability of means to reach a results, while self-determination refers to the connections between volition and action (Patrick, Skinner, & Connell, 1993) and so concerns the possible constraints to enacting a course of action. In some ways, perceived autonomy also concerns the relationships between agents and means, but it is of a different nature compared with control beliefs about one’s own capacity or competence. While agents-means control specifies to what amount and degree the self has the means to undertake an action, autonomy beliefs refers to how much the subject feels to be free in undertaking an action and so feels the self as the origin of her actions.

High-power individuals control a great deal of resources and they can access them independently from others. For this reason, they have a self-perception of high autonomy in initiating relevant actions. This equals to saying that sense of power entails an internal locus of causality, because powerful people perceive their own authentic self as their origin of their behavior and they do not feel to be moved from heteronomous forces.

Attributing the locus of causality means individuating the “place” where the action is started with reference to the agent (deCharms, 1981; DeCharms, 1968; Heider, 1958). Thus, this construct refers to where the individual locates the origin of her own actions (*Table 3*): she can attribute her actions to herself (internal locus of causality), to another person (external locus of causality) or to the environment, independently of anyone’s intention (impersonal locus of causality). If the individual cannot perceive causality as originating

well-being. Indeed, in their Self-Determination Theory, Ryan and Deci (2000b) acknowledge sense of autonomy as one of the main sources of intrinsic motivation. They posit that three basic needs – i.e. need for autonomy, need for competence (equivalent to self-efficacy) and need for relatedness – act concertedly to (intrinsically) motivate behavior and ensure personal well-being. Intrinsically motivated behaviors are those that do not require operationally separable consequences but only the agents’ interest to be initiated, and that do require the satisfaction of the basic innate psychological needs to be maintained (Deci & Ryan, 2000).

in herself, she feels as a pawn in the hands of external forces, such as other people or the fate or other inscrutable powers (DeCharms, Carpenter, & Kuperman, 1965).

Table 3 - Types of locus of causality

<i>Origin</i>	<i>Pawn</i>	
Self	Another person	The environment
Internal locus of causality	External locus of causality	Impersonal locus of causality

An internal locus of causality means that the self, and not generically the person, is at the origin of her own behavior. The difference is not a captious remark. The person is a socially definable, visible entity, that distinguishes one physical individuality from another. To this respect, individual A is a different person from individual B or C. However, to ascertain that it is me, and not another person, to make certain actions is not sufficient to attribute an internal locus of causality to my actions. More properly we should evaluate the locus by using the self as reference point. The self is a phenomenal center that is not isomorphic with the person or with the physical being. Thus, even forces residing within the person, may be perceived as heteronomous, and so external, to the self. Indeed, external reinforcements of action can be internalized by the individual. Therefore, the reasons motivating behaviour can either be truly intrinsic or they can be internalized to different degrees or they can be completely heteronomous.

Autonomy is not the same as independence in choice (Ryan, 1993), as the latter construct involves being free of constraints while the former is more properly about the endorsement of actions by the self. In other words, one is self-perceived as autonomous if she, even in presence of constraints to choice of some sort, can internally endorse the action to undertake (Ryan & Deci, 2006). For the same reason, having more choice is not equated to more autonomy, since it is necessary that the courses of action available to the self are not perceived as imposed by external forces.

One common approach to measure autonomy entails identifying the reasons that moves one's behaviour. These reasons can be thought of as regulatory events/inputs (e.g. promises of rewards, deadlines, choice

opportunities, feedbacks about the accuracy of the outcome, competition, etc.) that initiate action (Deci & Ryan, 1985b; Ryan & Deci, 2000) and are classified on the basis of the amount of autonomy they express. A sub-theory within the Self-Determination Theory, the Organismic Integration Theory (Deci & Ryan, 1985a), is devoted to itemize different types of extrinsic motivation, depending on their degree of internalization.

Amotivation, which is the lack of intention to act, corresponds to an impersonal locus of causality and is also often associated with perceived non-relevance, non-intentionality, non-contingency and low competence¹².

The least autonomous reasons for initiating one's actions are external: these reasons originate totally outside the person, and include such motivators as expectations of rewards, threats, bribes, and punishments. They can lead to either compliance or reactance¹³, since both of these processes are expression of an external locus of causality. Next along the continuum of autonomy, there are the introjected reasons, namely those reinforcements that are directly incorporated within the person. They pressure the individual to act by leveraging esteem-based mechanisms, such avoidance of guilt, shame or disapproval. In these cases the individual, rather than feeling that she/he really wants to behave in certain way, experiences some internal forces as acting on the self. Instead, identifications refer to actions initiated by one's own values and goals. The individual self-endorse goals and consciously values a given activity as instrumental and finalized to reach these goals. For example, you can think of the aspiring lawyer memorizing codes because she wants to pass the graduation exam, which represents her focal goal. The most autonomous form of extrinsic motivation is integrated regulation that occurs when identified regulations are fully assimilated to the self. This can happen when the individual brings new regulations into congruence with one's other values and needs, operating a hierarchical synthesis of goals. The more the reasons for one's action are identified and assimilated to the self, the more one's extrinsically

¹² Nevertheless low autonomy beliefs are not to be confused with low control (contingency and competence) beliefs.

¹³ Reactance is the motivational arousal to regain lost autonomy (Brehm, 1966).

motivated actions become integrated and self-determined. Finally, the intrinsic reasons stand for the enjoyment or fun that emanates from an activity. Intrinsic motivation is innate rather than internalized, in that it refers to activities that are inherently interesting and enjoyable (Deci & Ryan, 2000). So, intrinsic motivation represents the prototype of self-determined behaviour and can only be approximated by internalization processes.

While external and introjected regulation have an external perceived locus of causality (since they are seen as emanating from outside the self), the more internalized or intrinsic forms of regulation correspond to different degrees of an internal perceived locus of causality (Niemic & Ryan, 2009).

The functional significance (i.e. the psychological meaning) of the events/inputs regulating behaviour can be classified as either informational (i.e. as supporting autonomy and promoting competence) or controlling (i.e. pressuring one to think, feel, or behave in specified ways). Nevertheless, the functional significance of an input is not pre-determined and permanently associated with the features of the input, but it is instead determined on the basis of the interpersonal context within which the event is administered and of the causality orientation of the individual (Deci & Ryan, 1985b). For example, a positive feedback could be perceived as either informational or controlling, depending on the experimenter's style of communication (Ryan, 1982). Furthermore, people display differential tendencies to perceive a stimulus as informational versus controlling, independently from the features of the stimulus itself. For example, some individuals are keen to experience events as sources of information that can facilitate the initiation and regulation of a chosen behaviour. Others, to the opposite, tend to perceive stimuli in the environment as rewards and threats regulating behaviour in a forceful way. The degree to which an input is informational vs controlling determines the probability that it is internalized by the agent.

That being said, specific characteristics of regulatory inputs make them more likely to be experienced as informational versus controlling¹⁴. Thus, the functional significance of regulatory inputs is the interpretation that the recipients are likely to give to the inputs themselves, given the interpersonal context and the causality orientation they possess (Deci, Koestner, & Ryan, 1999).

Here we can clearly see the difference between the locus of control of reinforcements and the locus of causality for behaviour. The former emphasizes the connections between the behaviour and the reinforcement, while the latter focusses on the behaviour itself and not on its consequences (reinforcements; deCharms, 1981). Even better, locus of causality assesses the degree of autonomy in behavior through the evaluation of the degree of internalization of reinforcements (which are viewed as expectations motivating the behavior itself).

Personal and social power both entail an internal locus of causality, but to different degrees. The individuals perceiving personal power have control over resources valued as indispensable by themselves to pursue their desires more deeply. Therefore, they do not expect external incentives for undertaking actions that they found gratifying *per se*. Quite differently, high-social power people are in charge of resources representing incentives to someone else's actions. Anyway, through their proxy control, such individuals can obtain some freedom in acting for themselves. The greater their proxy control is (i.e. the

¹⁴ The main factor determining how much a reward is perceived as controlling is the degree of contingency of the reward on initiating the task, or completing the task, or performing well on the task (Deci et al., 1999). Basically, if the individual receives the reward regardless of her participating in the task or not, then the reward will be perceived as not controlling. Instead, when the reward is contingent on active participation in the task or even on reaching pre-specified task-related outcome (such as accuracy in performance), it will be perceived as controlling. However, controlling aspects of task-contingent rewards can be offset to the extent that they cue competence (which is another pillar of intrinsic motivation in the Self-Determination Theory).

Also the interpersonal context can be perceived as more or less controlling to the extent that people within the context feel pressured to think, feel or behavior in certain ways. Since extrinsically motivated behaviors are not inherently interesting and thus must initially be externally prompted, the primary reason for which people are likely to be willing to do the behaviors is that they are valued by significant others to whom they feel (or would like to feel) connected, whether they be a family, a peer group, or a society. This suggests that the groundwork for facilitating internalization is providing a sense of belongingness and connectedness to the persons, group, or culture disseminating a goal, or what in SDT we call a sense of relatedness. In classrooms this means that students' feeling respected and cared for by the teacher is essential for their willingness to accept the proffered classroom values.

greater it is their resources' exchange value), the greater it is their perceived autonomy. This sense of autonomy could only be offset by a potential sense of responsibility for the people that the powerful is in charge of and is able to influence. In fact, being aware of the crucial role of the controlled resources in pursuing others' goals, can make the powerful prioritize ethical considerations in her own behavior and so shrink her sense of autonomy (Leach et al., 2017; Patrick et al., 1993). In this perspective, impairments in social power in one domain could paradoxically be beneficial for personal power. To the opposite, we already noticed that low-autonomy states (amotivation) could result in general powerlessness, helplessness and social insignificance (Abramson, Seligman, & Teasdale, 1978).

In summary, we see that personal power entails capacity beliefs concerning the access to one's own valued resources, contingency beliefs regarding own ends, an internal locus of control and an internal locus of causality. Instead, social power prompts capacity beliefs concerning the access to others' valued resources, proxy control afforded by those resources, contingency beliefs regarding others' and own ends, an internal locus of control and an internal locus of causality warranted by proxy control.

Since the control and autonomy beliefs implied by personal power are also subsumed by social power, it may look as personal power automatically follows from (is implied by) social power, and thus social power might be nothing more than a specific form of power (in which the controlled resources happen to be valued by others). At the same time, one could speculate that a high level of personal power affords also proxy control and influence over others (and so social power). In fact, having multiple options to conduct an action can provide high personal power individuals with an advantageous position in negotiations. Alternatively, highly autonomous behavior could make the individual look as more competent and afford influence over others. However, as we saw, personal and social power coincide with different configurations of specific control and autonomy beliefs, and, at the same time, entail different accessory beliefs.

Moreover, even if the motivational strength related to personal and social power is not essential to their definition, nevertheless these two flavors of power might differ as for how they satiate an innate need for power (as we will see in the next paragraph).

2.1.2 The need for power

The real existence of a basic and innate need for power in living species is still a matter of debate.

If such a motive is postulated (whether it is innate or situational), then the need for power is triggered whenever perceived power (or single component beliefs) is compromised by impaired feeling of controlling valued resources. In this perspective, low power states are seen as uncomfortable and associated with unpleasantness, while optimal level of power are pleasant and essential for psychological functioning.

Furthermore, the threshold beyond which the desire to restore lost power is activated should vary within individuals. That is, there may exist individual differences in the strength of the need for power.

According to McClelland (1961), the need for power (nPower) is one of three basic types of human motivation (along with the need for achievement and the need for affiliation). In Winter's words (1973), the power motive is 'the extent to which people want power, or strive to affect the behaviour of others according to their own intentions'.

In consumer behaviour, a proof of such a power motive might be the compensatory consumption and the lure of luxury by low-power individuals (David Dubois, Rucker, & Galinsky, 2012; Rucker & Galinsky, 2008, 2016): these consumers seek status-related products to provide for their lack of power.

However, researchers have been interested more often in distinguishing between different kinds of power motives on the basis of the individual components of power beliefs (capacity, contingency, control, autonomy, etc.) that may function as motivational regulators of behavior (Inesi, Botti, Dubois, Rucker, &

Galinsky, 2011; Lammers et al., 2016; Leach et al., 2017). The sense of power may serve to satiate the cravings for control (control motive) or autonomy (need for autonomy). For instance, while it is harder to assess the existence of a general power motive, some evidences support more easily the hypothesis that certain power beliefs are functional for fulfilling the need for control (Fiske & Dépret, 1996; Inesi et al., 2011). In this view, power constitutes one of the sources (along with choice for instance) of personal control. Multiple sources of personal control compete for the satisfaction of the basic need for control, such that when one source (e.g. power) is impaired, people seek out another source (e.g. choice) to satisfy the control motive (substitutability hypothesis). In addition, by the threshold hypothesis, when the need for control is already satisfied by one source, increasing another source provides diminishing, if any, benefits to the basic need (Inesi et al., 2011).

Other researchers state that, if one is to distinguish between the desire for influence (identified with need for social power) and desire for independence (identified with need for personal power), the latter has a priority over the former (Lammers et al., 2016; van Dijke & Poppe, 2006). Indeed, even the existence of such a thing as a social power motive is questionable. While it may seem reasonable to assume a need for personal power – functional for the human necessity to produce intended effects and effectively cope with the environment – there are not so obvious reasons to also postulate that people are inherently motivated to control other people. For example, people tend to prefer jobs granting high autonomy (and little influence) over jobs offering high influence but low autonomy. In addition, perceived autonomy (and not perceived influence) has been shown to mediate the impact of a low power position (experimentally manipulated) over the desire for power (Lammers et al., 2016). This testifies that autonomy is the primary driver of the desire for power because gaining autonomy through a power position quenches the desire, but gaining influence does not. This also means that people seek power positions to gain autonomy and not to gain influence. Therefore, only striving for personal power (and not luring for social power) might be truly inherent to the human species.

2.1.3 Related but distinct concepts

The interest for sense of power as a psychological state has arisen in the scientific literature as a distinct topic only recently (Anderson & Berdahl, 2002; Galinsky et al., 2003), so some confusion persists about similar or related concepts, that yet have to be differentiated from sense of power. One such concept is dominance (Anderson & Kilduff, 2009; Buss & Craik, 1980), which is more of a dispositional trait concerning the tendency to be assertive and self-assured in behavior. Part of confusion between the concepts of dominance and (social) power is due to the fact that frequently people in command positions also act coherently with the dominance trait. Therefore, it may seem that dominant individuals tend to gain greater power and influence over peers. The mechanisms that would make this happen are still unclear, especially considering that the influence cannot be gained by a group member simply by force, but it is rather the group to confer influence to a deserving individual. One of the mechanisms that could explain the relationship between dominance and social power may be that dominant individuals, showing off confidence and assertiveness, are usually perceived as having greater competence than the others, irrespective of whether they are truly competent (Anderson & Kilduff, 2009). A further proof of this thesis comes from another study too: it has been observed that the dominance attributed by the subjects to political candidates predicted the actual election of those candidates only when it was mediated by the subjects' perception of the candidates' competence (F. F. Chen, Jing, & Lee, 2014). Instead, the direct impact of dominance perceived by subjects on winning the elections – while controlling the relationship for the positive association with competence – was even negative. Indeed, dominance influences how much the individuals are perceived as competent, and not their true competence level. Congruently, it has been shown that powerful individuals manage to gain influence in many diverse domains and groups, from ethical dilemmas (Aries, Gold, & Weigel, 1983) and mechanical tasks (J. A. Smith & Foti, 1998), to allocating capital to the employees of a hypothetical company (Anderson & Berdahl, 2002). It is hard to imagine dominance to be correlated with actual competence in all these different contexts. In addition, it has been

repeatedly observed that dominance is uncorrelated with general cognitive ability (J. A. Smith & Foti, 1998). Thus, dominance is not necessarily an attribute of the power-holders, but it affects the likelihood to get influential roles through the perception of competence by others.

Another concept that is often confused with power is leadership. Power is not the same as leadership. Indeed, power, even when measured structurally in the contextual network of the actor, can be at most a predictor of leadership. The latter is defined as the ability of the individual to persuade in-group members to forgo some of their individual goals to put effort in common welfare and goals (Hogan, Curphy, & Hogan, 1994; Hu & Judge, 2017; Zaccaro, 2007). Actually, the leader could also be more able to gain power within a social group, because the other members may provide her with the control over valued resources in order to allow her to better lead the group toward common objectives.

There are also some overlaps between the concepts of power and authority, in that authority is power derived from institutionalized roles or hierarchical positions (Dillard, Rigsby, & Goodman, 2004; Keltner et al., 2003). Since an institutionalized role guarantees to the individual in charge of it at least some control over certain resources, it also confers some power over individuals in subordinate roles or individuals with interests at stake with that institutional position. However, power as intended here does not derive necessarily from holding an institutional or institutionalized office, but it simply derives from controlling valued resources. This is why this kind of power can establish also in informal relationships and networks.

Another concept related to power – but that is not a synonym to it – is status, which refers to how much an individual is respected and prominent within a social group. It is true that individuals in possess of high status can generally draw a great deal of resources, at least more than their low status counterparts (Anderson, John, Keltner, & Kring, 2001; Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). In addition, status holder achieve power mainly because of their control over immaterial resources and social gratification (such as approval and likeability). Anyway, even if the two concepts of power and status are clearly associated, they are intertwined in a complex way, since there are cases of high status people with low sense of power, and cases of low status people with high sense of power. It has also been shown that

there are roles (for example, airport security officer, or receptionist) that structurally provide more power to who is in charge of them, but at the same time deny them the status, since these roles does not give a comparable level of respect in the eyes of others (Fragale, Overbeck, & Neale, 2011).

2.2 Operationalizing sense of power

2.2.1 Manipulation tasks

Power has been operationalized in a lot of different ways, depending on the study's objectives and characteristics. Both priming techniques, aimed at directly manipulating sense of power in participants, and self-report measures have been used. Sometimes even physiological measures have been employed to assess the activation of power.

Manipulations (i.e. priming) of sense of power are better suited to experimental designs and so are employed mainly within the context of the lab. These instruments are intended to instantiate a sense of power in the respondents, typically by asking them to solve some task. These techniques have been borrowed from studies involving purely cognitive tasks¹⁵ (Bargh, 1994; Henson, Eckstein, Waszak, Frings, &

¹⁵ There is quite confusion in the terminology that refers to the numerous existing priming techniques, which are classified by different psychological disciplines on the basis of diverse criteria (facilitation vs. inhibition of the response, semantic vs perceptual prime-target relationship, short-term vs long-term, etc.). Moreover, each priming technique can be embedded in different kind of tasks (word-fragment completion task, lexical decision task, Stroop task, etc.), and the prime and the target stimuli can also be separated in two different tasks or phases (for instance, the prime in an exposure phase and the target in a word-stem completion task). The priming effect reveals itself in the difference between the reaction to the prime and the reaction to the target or to a comparable stimulus not preceded by the prime (unprimed stimulus or foil) (Henson et al., 2014). Priming is a common practice in studies on attention, memory, and in psycholinguistic, that are used to distinguish between positive and negative priming (Henson et al., 2014; Marsh, Beaman, Hughes, & Jones, 2012; Mayr & Buchner, 2007; Stadler & Hogan, 1996), depending on whether the first stimulus (prime) facilitates (speeds up) or inhibit (slows down) the processing of a second stimulus. Prime and target can also be shown simultaneously, but usually the target follows the prime (sequential priming). For example,

Horner, 2014), and adapted to social psychology research¹⁶ (Molden, 2014). Generally, priming refers to the internal readiness created unconsciously in the mind of individuals by current or recent experienced events

in a lexical decision task, subjects are quicker (positive priming) in identifying a target character string (e.g. “sun”) as a word existing in English, if it is preceded by another word related semantically (e.g., “Venus”, semantic or conceptual priming), graphically (e.g., “gun”, perceptual or form priming) or statistically (e.g., “moon”, associative priming), compared with a non-related prime. The prime can be presented either supraliminally or subliminally, that is with a very short presentation time – 10 to 50 ms – and masked by symbols such as ##### (masked priming) presented either immediately before or after the prime (Kiesel, Kunde, & Hoffmann, 2007). Instead, the target stimulus is usually supraliminal. Moreover, the stimuli can be presented through different channels (textual, visual, auditory, haptic, etc.). A particular kind of positive priming is repetition priming (Forster & Davis, 1984), based on the assumption that an experienced stimulus functions as a prime for subsequent and repeated presentation of the same stimulus, determining – e.g. in lexical decision tasks – a progressive increasing in accuracy and/or speed in word recognition. Sometimes, repetition priming is referred to as direct priming, as opposed to indirect or semantic priming, in which the prime is not the same as (but is only related to) the target (Ochsner, Chiu, & Schacter, 1994). The negative priming paradigm instead calls for sequential presentation of stimuli, each of which is made of a target element – that the subjects are instructed to respond to – and distractors, that need to be ignored. One of the stimuli (called probe) include as target an element presented in a previous trial as distractor. The reaction to the probe-target is inhibited and inaccurate because of the previous effort in ignoring the stimulus presented as prime-distractor (Mayr & Buchner, 2007).

Response priming consists in either a facilitation or an inhibition of the reaction to the target stimulus, depending on whether the latter is preceded by a prime (presented for a few milliseconds and thus indiscernible) mapped to a compatible vs. incompatible reaction than the one mapped by the target (Schmidt, Haberkamp, & Schmidt, 2011). Therefore, in this case, the link between prime and target is the coherence between the reaction elicited by the prime and the reaction elicited by the target.

Affective (or evaluative) priming involves affective reactions to stimuli and results, for example, in greater liking of images primed with human faces expressing happiness (Murphy & Zajonc, 1993). It can be considered as a form of response priming.

¹⁶ Within the context of social psychology the main types of priming adopted are the sequential priming, conceptual priming, the mindset priming (Bargh, 2014; Bargh & Chartrand, 2000; Doyen, Klein, Pichon, & Cleeremans, 2012). Sequential priming techniques basically build upon the paradigm of response priming, using prime-target pairs eliciting congruent or incongruent attitudinal responses (as in affective priming, see note 5). Instead, conceptual and mindset priming – within the context of social psychology – are generically referred to as social or behavioral priming, in that they are not so much concerned with the spreading activation from one stimulus to another, but rather with the effects of the prime on complex behaviors, that are often quite distal to the prime stimulus. In this perspective, conceptual priming refers to the activation of the mental representations related to a concept in a given category. These mental representations spread over unrelated context in an unintended and unconscious way. Researchers adopting this type of technique usually take care of the task with the concept-relevant information (i.e. the priming task) not being the same as the subsequent task of the experiment assessing the occurrence of the priming effect. In such a way, the priming effect can be considered as due to the concept primed and not to the procedure required by the tasks (indeed, this is precisely what differentiates conceptual priming from mindset priming). Conceptual priming can be purposely employed to prime trait-like concepts, judgements, feelings, goals, motivations and behavior. The same priming task used for activating the prime-related concept (e.g. a scrambled sentence test activating the concept of rudeness) produces motivational and behavioral as well as judgmental and perceptual effects, and it is only up to the experimenter to adopt an ad-hoc dependent variable to detect a specific effect.

Mindset priming instead requires the active and intentional (and sometimes repeated) use of a procedure suitable to reach a given result, and it exploits the carry-over created by practicing the procedure. Repeating a behavioral task builds momentum for a goal-achieving procedure to easily transfer from the original context and operated within contexts unrelated with the original one. Thus, this type of priming is intended to instantiate a particular mindset or procedure. It can also be used to prime motivations or processing goals. The priming of an actual motivational state

or actions. A recent experience gets the individual prepared to some kind of response, evocated by the experience itself.

A first class of manipulations used in research on sense of power are basically forms of conceptual priming. Some of these stimuli vary the control over resources, mimicking structural relationships occurring in society between subjects at different hierarchical levels, such as bosses and employees, coaches and players, parents and children, teachers and students. In theory, every dyadic relationship of this nature, and socially codified, can serve the aim to activate the related representation of power within the individual, and stand in as priming of power. In practice, at least up to now, only some of these roles (and primarily the boss-employee dyad) have been employed with certain frequency in imaginative tasks. In addition, it is researchers' concern avoiding roles semantically related with subsequent tasks and/or variables of interest (e.g. dependent variables), unless they want just to pursue a realistic experimental design or test for the impact of specific hierarchical roles on other variables.

Thus, in the hierarchical role task (Anderson & Berdahl, 2002; Jin, He, & Zhang, 2013), first participants complete a Leadership Questionnaire and are told that their responses will be used to assign them to the role of manager – boss – or subordinate – employee. The experimenter ostensibly scores the questionnaire and assigns participants to the high-power or low-power role. The boss is given instructions that emphasize that he or she will have complete control over the work process, the evaluation of the subordinates, and the division of rewards. Thus, the person in this role controls processes, individual outcomes, and the distribution of valuable resources. The employee is told that he or she will have no control over how the work is performed, evaluated, or rewarded.

may also entail a behavioral task triggering a discrepancy between the actual state and a desired state (that is impairing or frustrating the current level of a subjective state and prompting the desire to restore an optimal level). The latter manipulation has been shown to elicit even greater motivation if the priming task and the measurement of the dependent variables are separated by a filler task delaying the immediate satisfaction of the goal (A.-S. Chaxel et al., 2016).

This kind of manipulation has been shown to work also when subjects are overtly assigned to roles based on arbitrary decisions of the researchers (David Dubois et al., 2012). In this study, participants were not asked to fill in a Leadership Questionnaire, upon which being assigned to either role. Instead, participants were simply told:

We would like to imagine you are a boss/employee at a company. Read about the role below and try to vividly imagine what it would be like to be in this role (i.e., how you would feel, think, and act).

Then, participants in the high-power condition were asked to read the following excerpt:

As a boss, you are in charge of directing your subordinates in creating different products and managing work teams. You decide how to structure the process of creating products and the standards by which the work done by your employees is to be evaluated. As the boss, you have complete control over the instructions you give your employees. In addition, you also evaluate the employees at the end of each month in a private questionnaire—that is, the employees never see your evaluation. The employees have no opportunity to evaluate you.

Low-power subjects read:

As an employee, you are responsible for carrying out the orders of the boss in creating different products. The boss decides how to structure the process of creating these products and the standards by which your work is to be evaluated. As the employee, you must follow the instructions of the boss. In addition, you are evaluated by the boss each month, and this evaluation will be private, that is, you will not see your boss's evaluation of you. This evaluation will help determine the bonus reward you get. You have no opportunity to evaluate your boss.

Alternatively, participants are assigned to the role of manager or subordinate for a subsequent task, with the manager having power over the subordinates, and then are asked to read the descriptions corresponding to their roles (Jiang, Zhan, & Rucker, 2014). Then participants are told that, while the group task is being set up, they are going to get involved in an unrelated task for another study. The manager-subordinate task will not take place at all.

Allegedly, many different variations of the hierarchical role task can be thought of, simply changing the roles involved. Garbinsky, Klesse and Aaker (2014) have the subjects imagine being either a college student entitled to guide a group project or a college student assigned as a member to the group project.

The experience of power can also be activated via episodic recall (Galinsky et al., 2003). Participants assigned to the high-power condition recalled and wrote about an experience in which they had power over another person – power was defined in their original manipulation as “a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals” (p. 458). In contrast, participants assigned to the low-power condition recalled and wrote about an experience in which someone had power over them.

This kind of experiential manipulations has also been used to tap and approximate specifically feelings of social power (specifically perceived autonomy) or personal power (specifically influence). To prime high (vs. low) autonomy participants may be asked to recall an experience in which they were free and independent (vs. lacked freedom and independence), and so they could determine what they would get (vs. someone else could control or direct them)¹⁷. Alternatively, an autonomy prime could have participants recall an episode in which they influenced or controlled other people (Lammers et al., 2016).

¹⁷ In an alternative autonomy (personal power) priming task, participants in the high-personal power group could be asked to recall an episode in which they were uncontrolled by others, while participants in the low-personal power group – to the opposite – should recall an episode in which they were controlled by others (Leach et al., 2017).

There are studies in which power has been instantiated by simply cuing subjects about how they feel. For example, in a field experiment Dubois, Rucker and Galinsky (2012) had highly visible banners set up on each of the lobbies of a high-rise building in a metropolitan area. These banners advertised House of Bagels, a supposedly new bagel chain in the area, but the specific content of the banners varied from one lobby to another. The banner in one of the lobbies (low-power condition) reported: “We all feel powerless in the morning: Treat yourself to free bagels.” In a second lobby (high-power condition), the banner read: “We all feel powerful in the morning: Treat yourself to free bagels.” In the third lobby (baseline condition), the banner said “It’s morning: Treat yourself to free bagels.” People that approached the banners were immediately intercepted by the experimenters, who asked them to participate in the subsequent part of the experiment.

It is also possible to employ different semantic priming techniques, by exposing subjects to power-related words, and so activating the construct of power outside of participants’ awareness. For example, participants can be asked to unscramble scrambled sentences containing a word related either to low power (e.g., *subordinate*) or to high power (e.g., *authority*; Bargh, Raymond, Pryor, & Strack, 1995; P. K. Smith & Trope, 2006), or to complete fragments of power-related words by filling in the missing letters (Anderson & Galinsky, 2006).

Previous literature also reported cases in which the sense of power was instantiated through physical manipulations. There are various manipulations falling into this category. For example, one of these techniques involves placing people into an expansive pose (presumed to create a state of high power) or constrictive pose (presumed to create a state of low power; Carney, Cuddy, & Yap, 2010). Otherwise, people may be asked to make hand gestures related to power states (making a fist with the non-writing hand, throughout a writing task; Schubert & Koole, 2009). Also specific seating positions have been shown to reliably affect sense of power (S. Chen, Lee-Chai, & Bargh, 2001; Garbinsky et al., 2014): depending on the condition they are in, participants could be asked to sit either in a tall chair – high power – or on an ottoman – low power. In a series of experiments Stel et al. (2012) induced sense of power in participants by

having them reading aloud a text with a pitch either three tones higher than their usual pitch (low-power condition) or three tones lower than their usual pitch (high-power condition). Participants in the control condition were instructed to read the passage silently in their mind. The manipulation checks confirmed that the priming technique adopted was effective in eliciting sense of power.

Finally, another kind of structural manipulations involves the ultimatum and dictator games to prompt power (Sivanathan, Pillutla, & Keith Murnighan, 2008), in a mindset priming fashion. In an ultimatum game, two parties decide how to allocate a resource (e.g., \$10). One member (the offerer) suggests a proposed division. If the other participant (the receiver) accepts the offer, then the money is divided according to the proposed proportions. If the receiver rejects the offer, then both parties receive nothing. In the ultimatum game, the offerer has more power than the receiver because the offerer sets the terms of the division. However, there is some constraint on the offerer's power because the receiver is able to choose whether to accept the proposed division. The fact that the offerer gets on average significantly more than 50% of the divided money empirically confirms that the offerer has greater power. In the dictator game, the offerer has complete control over the division of a resource. The receiver can reject his or her allocation but cannot affect the offerer's outcome. Suleiman (1996) created a manipulation that allows researchers to vary the power difference along a continuum from the weaker power of the ultimatum game to the greater power of the dictator game. He did so by adding a discount factor, δ ($0 \leq \delta \leq 1$). A rejection of the offer by the receiver in a standard ultimatum game produces a 0-0 outcome. In the modified version (the delta game), rejection of the offer leads to a multiplication of the proposed outcomes for the offerer and the recipient by δ . For example, when $\delta = 0.5$, rejection of a 70-30 offer leads to a multiplication of outcomes for both players by 0.5, resulting in a 35-15 division. The delta game covers the entire continuum between a standard ultimatum game and a dictator game. When $\delta = 0$, it is identical to the standard ultimatum game, and when $\delta = 1$ it is identical to the standard dictator game.

It should also be noted that priming techniques are suited to be tailored to crucially manipulate the moderators of power along with power itself. For example, power legitimacy could be varied across

conditions by assigning participants to power positions on the basis of a leadership questionnaire vs. some extraneous factor, such their gender (Lammers, Galinsky, Gordijn, & Otten, 2008). The authors are also able to obtain the same combination of factors by manipulating a semantic priming task. Within a single word-search puzzle, participants were instructed to individuate and encircle words related either to high power (*authority, power, control, influence*) or to low power (*subordinate, submit, dependent, assistant*) and words related either to legitimacy (*fair, legitimated, justified, good*) or illegitimacy (*unfair, illegitimate, unjust, bad*), depending on condition. Similarly, experimenters can manipulate the status of the power roles participants are assigned to, by associating the role with either respect or disrespect (Fast, Halevy, & Galinsky, 2012). An additional example would be designing a structural manipulation of power made to last throughout the entire experiment (high stability of power) or to vary (low stability) depending on what happens during the experiment (Jordan, Sivanathan, & Galinsky, 2011).

2.2.2 Individual differences measures

Sense of power is strongly associated with many individual differences. There are several self-report scales to be used. These measures would allow using sense of power either as an independent or a dependent variable or in any other role in a causal chain. The most direct and specific measure of sense of power is probably the Personal Sense of Power Scale, developed by Anderson, John, and Keltner (2012), designed to capture individual variation in one's perceived ability to influence other people. The items can be tailored to reflect one's influence over another individual in a specific relationship, across relationships within a specific context (e.g., in one's workplace), or one's general sense of influence across contexts and relationships. The scale has good external validity because individuals who occupy managerial roles at work and have more power report feeling more powerful than those occupying subordinate roles.

The standard version of this scale involves the following items, measured on a 7-level agreeableness scale:

In the negotiations ... (for specific interactions) / In my relationships with my friend [mother, TA, date, etc.] ... (for relationships, i.e. multiple interactions) / In my sorority [dormitory floor] ... (for groups, i.e. multiple relationships) / In my relationships with others ... (generalized, for all relationships, groups)¹⁸

1. I can get him/her/them to do what I say.
2. My wishes do not carry much weight. (r)
3. I can get him/her/them to do what I want.
4. Even if I voice them, my views have little sway. (r)
5. I think I have a great deal of power.
6. My ideas and opinions are often ignored. (r)
7. Even when I try, I am not able to get my way. (r)
8. If I want to, I get to make the decisions.

This scale could also be seen as tapping more properly social sense of power. A measure more suitable to assessing personal sense of power may be the three-item scale developed by Cichocka and colleagues (2018), in which participants are asked to indicate how much control they feel over their own outcomes on a semantic differential ranging from 1 to 7 (Table 4).

Table 4 – Personal sense of power scale

1	2	3	4	5	6	7
I feel I have little control over my life	-	-	-	-	-	I feel I have great control over my life
I have little influence on my fate	-	-	-	-	-	I have great influence on my fate
There are many things in my life I cannot influence	-	-	-	-	-	There are few things in my life I cannot influence

¹⁸ The introductory statement can be adapted to reflect the degree of specificity of subjective power that the investigator is interested in (Anderson et al., 2012).

2.2.3 Physiological measures

Various physiological individual differences are also related to the possession of power. In particular, the hormonal profile appears to be discriminant of a certain state of power. Both testosterone and cortisol are related to dominance behavior (Mehta & Josephs, 2010) and to power motives (Wirth, Welsh, & Schultheiss, 2006), so it is not surprising that they are thought of as biological markers of power. High testosterone and low cortisol appear to configure the hormonal profile of high power, whereas low testosterone and high cortisol characterize people in conditions of low power (Dana R. Carney et al., 2010; Mehta & Josephs, 2010). These hormones are part of a dynamic neurobiological system sensitized to hierarchical position, responsive both to prospective and to recent changes in rank (Mehta & Josephs, 2010; Wirth et al., 2006). However, they are also complicated measures of power because the dynamic nature of testosterone and cortisol requires accounting for diurnal hormone cycles, a pretest and posttest to accurately measure hormone change, and the resources for the requisite medical laboratory analyses.

2.3 Consequences of power and implications for consumer

Sense of power affects individuals' cognition, self-perception, social perception, motivation, performance and behavior. Results from the literature suggest that people must be attuned to their level of power and have a range of behavioral repertoires that get activated depending on one's power in a given situation.

2.3.1 A fundamental premise: the power-dependence link

An essential notion – directly derived from the definition of power – is assumed (sometimes implicitly) in most of the theories and empirical hypotheses concerning power. Namely, the fact that powerful individuals do not depend upon others and are uncontrolled by others. This fundamental fact has direct physiological correlates because it implies that sense of power increases tolerance for stress and acts as a buffer in stressful situations that arouse negative physiological effects. For example, subjects primed with high power show no significant increase in their cortisol level after telling a lie, while subjects primed with low power show a significant elevation of their cortisol level (D R Carney et al., 2013). A similar differential pattern in hearth rate was found with high and low-power subjects that were asked to make a speech (i.e., a stressful social evaluation situation; Schmid & Schmid Mast, 2013).

In the following paragraphs I explore first the principal theories that, building on the power-dependency link, establish some foundational facts and effects about power (*paragraphs 2.3.2 to 2.3.5*), then I try to systematize disparate empirical findings explainable on multiple accounts (*paragraphs 2.3.6 to 2.3.9*), and finally I describe possible moderators of the effects of power (*paragraphs 2.3.10*). Multiple results concerning consumer behavior are described along the dissertation.

2.3.2 The power holder as an abstract thinker

Power influences the way people mentally represent their world. High power leads people to construe information more abstractly (Magee & Smith, 2013; P. K. Smith & Trope, 2006), focusing more on the gist of information (vs. concrete details) and categorizing information and objects at superordinate levels (vs. subordinate levels). In most cases it is argued that this effect is due to the fact that the power holders have the tendency to approach the situation with a psychologically distal perspective (P. K. Smith & Trope, 2006).

In fact, in the construal level theory, increased psychological distance¹⁹ is held to promote abstract information processing (Trope & Liberman, 2010), since it reduces the accessibility of concrete data related to target stimuli (Liberman, Trope, & Stephan, 2007). Abstraction entails looking at things from a distance, seeing them as a whole and extracting the gist from them. Powerful individuals can enjoy greater independence from others and thus manage to express their true self without constraints, compared with other people. This would promote their sense of distinction from others and increase a particular type of psychological distance, namely social distance²⁰ (Magee, Milliken, & Lurie, 2010; Magee & Smith, 2013). While social closeness is triggered when there is mutual dependence between at least two actors (both motivated to affiliate with the other and expecting to be reciprocated by the other), social distance, to the opposite, results from asymmetrical dependence between the actors (e.g. one actor does not have available alternative relationships or invested too significantly in the relationship with the other). The subject with relatively higher power is less in need to affiliate with the less powerful counterpart and simultaneously she expects the other to be highly motivated to affiliate with her²¹. The situation is mirrored for low-power people, because, even if they are more willing to affiliate, they also (correctly) suppose that

¹⁹ Psychological distance is experienced by a subject with reference to an object or a situation, and so it can be of different types depending on what kind of object is considered. Psychological distance can refer to an object/experience far away in time (temporal distance), in space (spatial/geographic distance), or belonging to someone else (social distance), or unlikely to materialize or happen (hypothetical distance, or hypotheticality) (Liberman & Trope, 2008). The tendency to abstract processing is influenced by each of these types of psychological distance. For instance, whoever is made to plan an event happening in a remote future will tend to focus on quite abstract information rather than on concrete details of the event. Alternatively, while thinking at an event located in a near place, the individual focuses on concrete details and not on the more general ones. In the same logic, an action performed by someone dissimilar from us is conceptualized to a more abstract level, than if the same action is undertaken by someone considered more close to us. Similar considerations have to be made for really unlikely events: they are interpreted at a high abstraction level. The pervasiveness of psychological distance in evaluating reality highlights new accounts for some biases in reasoning. For instance, planning fallacy – the distorted underestimation of the time required to complete a future task – could be explained just in terms of temporal distance (Fiedler, 2007; Kanten, 2011; Trope & Liberman, 2011). Indeed, in considering very distant future events, people tend to consider them more according to their desirability than their feasibility (that concerns the concrete level). Therefore, they are keen not to consider constraints that could increase dramatically the completion time of the task.

²⁰ Indeed, social distance can be defined as a perception or subjective experience of the distance from another person or persons (Magee & Smith, 2013).

²¹ What is more, this attribution about the other's affiliation intention, is most of the times over-estimated by power-holders who, because of the amount of controlled resources, are more cynical in inferring other's intentions (Inesi, Gruenfeld, & Galinsky, 2012).

the powerful subjects are scarcely motivated in affiliating with them. Therefore, in asymmetrical dependency, not only does the distance between the parties grows, but this distance is perceived asymmetrically by the actors depending on their sense of power, with the most powerful party seeing this distance as greater than the least powerful party does.

The depicted relationship between sense of power and social distance makes up the core of the so-called “social distance theory of power” (Magee & Smith, 2013; P. K. Smith & Magee, 2015), which employs social distance as the missing block to explain consequences of power and draw them coherently from the Construal Level Theory. Indeed, once established the link between power and social distance, the latter, in turn (as every type of psychological distance) fosters a way of interpreting target stimuli (i.e., objects, persons, events, actions and goals) at a higher (i.e. more distant) level. This is to say that psychological distance – according to the Construal Level Theory – automatically leads the perceiver to a high construal level²², irrespective of the type of psychological distance perceived by the subject.

The primary feature of high construal level is the tendency to abstraction, since it refers – by definition – to a schematic representation of the object that highlights its central/essential and superordinate characteristics (Trope & Liberman, 2011). To the contrary, the low construal level concerns a relatively unstructured representation of the object, emphasizing its incidental/peripheral and subordinate peculiarities.

However, the social distance theory of power pretends to be overarching as for the amount and the type of empirical results about sense of power that could be explained on a social distance/construal level account. For instance, according to this theory, social distance (and the related abstraction tendency) may explain the impact of sense of power on the resistance to social influence, on the confidence in one’s own

²² Moreover, a higher construal level is believed to determine in turn an increase in social distance, in a spiral of reciprocal relationships. In fact, those who interpret others’ behavior via the lens of a higher construal level also tend to perceive them as less familiar (Stephan, Liberman, & Trope, 2011). It also has been found that when an interviewer ask more abstract questions, she tends to develop less rapport (a type of closeness) with the interviewees (Rubini & Kruglanski, 1997).

estimates, on the person-behavior correspondence, on self-control, etc. The breadth of implications drawn from this theory is due to the fact that it sees sense of power essentially as a direct cause of a special type of social distance.

The tendency to abstract processing has been employed to explain many findings regarding both the perceptual and low-order cognitive effects, and the higher-order cognitive effects of power.

Low-power individuals would be more prone to see weak exemplars²³ as less prototypical of their category, or even to exclude them from the category. In fact, low-power individuals focus on the unique and concrete attributes of the exemplars, and this prevent them from seeing the bigger picture and the essential gist connecting the (no matter how weak) exemplars to the category they belong to.

High-power individuals, compared with low-power ones, are also more able to discriminate between groups of coherent words (sharing a common semantic core) from groups of uncoherent words (P. K. Smith & Trope, 2006). Once again, this difference is due to the proclivity to abstraction, since evaluating concepts at the superordinate level allows to find the elements common to different concepts more easily.

Also, at the perceptual level, abstraction would play a crucial role. In fact, increased power enhances the ability to complete fragmented figures (Gestalt pattern) by drawing shapes that truly match the fragments (Huang, Galinsky, Gruenfeld, & Guillory, 2011; P. K. Smith & Trope, 2006).

People are able to extract the gist of an object, only if they can distinguish essential properties from the ones that are not. Hence, abstract processing implies also the ability to distinguish primary and incidental information, both when the relative importance of information is inherent to the object and when it is established by the context. For instance, the capacity of the cabin is a more essential quality of a car than the GPS gear, and this is true irrespective of the contexts. However, it is not hard to come up with situations in which the contexts determines or even subverts the hierarchy of the attributes. Having a

²³ The weak exemplars of the category “vehicles” may be, for example, “tractor”, “sled”, “tank”, “feet”, etc.

certain goal might establish a different prioritization of the attributes (Gollwitzer & Moskowitz, 1996). For example, if a sales representative is considering the purchasing of a car for big trips in unusual places, all of a sudden the GPS gears becomes more important than the capacity of the vehicle (as long as the car can at least contain the driver).

Smith and Trope (P. K. Smith & Trope, 2006) also found that high-power individuals are more prone to identify a behavior or action (e.g., voting) at a higher level (e.g., changing the government), whereas low-power individuals are more prone to identify the behavior at a lower level (e.g., marking a ballot).

Similarly, Magee, Milliken, and Lurie (Magee et al., 2010) found that individuals in positions of power, such as government officials, described the events during the aftermath of the 9/11 terrorist attacks at a more abstract level than did individuals who had little or no power, such as volunteers or victims.

A sign of the abstraction tendency of high-power subjects is also the fact that these subjects are more prone than others to make false recognitions in experimental tasks involving the so-called critical lure (Roediger & McDermott, 1995). The task calls for the presentation of a list of words that are all strongly associated to another not presented word (i.e. the critical lure). Subsequently, subjects are asked to recall if certain words – among which there is also the critical lure – were or were not present in the list. Although the false recognition of critical lures is a generalized result (Roediger & McDermott, 1995), nevertheless high-power subjects are more keen than others to make this mistake (P. K. Smith & Trope, 2006; Stel et al., 2012). This error is due to the fact that people frequently turn to the gist to categorize perceptual objects and assist memory (Huff, McNabb, & Hutchison, 2015).

This finding about critical lures also shows that the powerful's abstract processing does not lead necessarily to improved cognitive performance, forasmuch as the false recognition of the elements of a list constitutes an error in terms of accuracy (P. K. Smith & Trope, 2006). In spite of this, however, sense of power actually enhances cognitive performances in many cases, by acting independently on other path, beyond that of abstraction.

2.3.3 How do powerful and powerless people respond to rewards and threats?

How do powerful individuals deal with problems? Do they react in a proactive and enterprising way, or they become hyper-dubious and fearful of making mistakes? How do low-power individuals behave instead? As one could easily imagine, powerful and powerless individuals would have very different inclinations towards the tasks that they encounter in their daily life.

A high-level of power is associated with the tendency to approach problems, while, to the contrary, an impaired level of power determines the tendency to inhibition. An established thesis of behavioral sciences is that there exist two neurobiological regulatory systems that preside over cognitive, affective, and behavioral responses and so highly affect also the configuration of personality in the individuals (Carver, 2004). One of these systems is responsible for the approach to appetitive stimuli. This system is called Behavioral Approach System, or BAS (Jeffrey A Gray, 1994; Johnson, Carver, Joormann, & Cuccaro, 2016), or Behavioral Activation System (Fowles, 1987) or Behavioral Facilitation System (Depue & Collins, 1999). The BAS responds to the incentives and leads the organism to try to reduce the difference between the current state and a desired state. The other system is called Behavioral Inhibition System (BIS) (Jeffrey A Gray, 1994) and acts as an alarm system, reacting to environmental threats and inhibiting the behavior.

Electroencephalographic data suggest a differentiated localization of these two systems. Responding to incentives seems to be associated with greater activation of the left prefrontal cerebral cortex. Instead, the perception of threats and obstacles is localized in the areas of the right prefrontal cortex.

There are individual differences in the sensitivity to these two different systems, in that people differ as for the degree to which they are energized by these systems. Moreover, individual sensitivity to the BAS varies independently from the BIS, and thus a highly BAS responding person does not necessarily respond less to the BIS.

Sense of power seems to trigger some deviations among individuals in the way in which they respond to these two different systems, as it has been theorized by the approach/inhibition theory of power (Hirsh, Galinsky, & Zhong, 2011; Keltner et al., 2003; Morrison, See, & Pan, 2015; P. K. Smith & Bargh, 2008; Van Kleef, Homan, Finkenauer, Gündemir, & Stamkou, 2011). Firstly, enlarged sense of power makes the individuals respond more to the behavioral activation system (Keltner et al., 2003). In fact, powerful individuals perceive to have available many resources and to be able to control them. In addition, on the basis of the controlled resources, they confidently think to be able to act freed from conditionings and without having to suffer from potential negative consequences (social consequences in the first place) for their actions. Therefore, they are more sensible to rewards and dazzled by the positive aspects potentially deriving from their own action, as a compensation for their efforts. People that perceive themselves as very powerful are quicker in individuating both material rewards (such as food and money) and social rewards (such as social approval and attention, sexual gratification, etc.), even in ambiguous and uncertain situations not bounded to provide good results. For example, the fact that men tend to infer sexual interests even in women's ambiguous behaviors (Keltner et al., 1998) can be interpreted in light of this theory, since men generally have positions with higher power than women and so they allegedly have a greater sense of power.

Some findings from neuroscience also support differential activation of the brain hemisphere by high power (left hemisphere) versus low power states (right hemisphere), coherently with the positioning respectively of the BAS and the BIS substrates (Boksem, Smolders, & Cremer, 2012). Also spatial biases attest approach-related neural activity, in that powerful subjects are found to be more inclined to bisect horizontal lines to the left of center (Wilkinson, Guinote, Weick, Molinari, & Graham, 2010). In fact, leftward deviation reflects dominance of the contralateral (right) hemisphere.

Instead, tests of the link between power and positive mood (that would be justified by increased approach motivation) has led to inconclusive results (Galinsky et al., 2015). While some studies do report enhanced mood in states of high-power (Berdahl & Martorana, 2006; Langner & Keltner, 2008; Wojciszke &

Struzynska–Kujalowicz, 2007), other studies found no association between sense of power and mood (Galinsky et al., 2003; Rucker & Galinsky, 2008; P. K. Smith & Bargh, 2008; P. K. Smith & Trope, 2006).

High-power individuals' approach motivation also implies their propensity to look at others as means to reach one's own ends and satisfy one's own desires. Powerful people are able to figure out the opportunities embedded in social interactions and so they cannot help seeing others in utilitarian terms to some degree (Keltner et al., 2003).

The preferential activation of the approach system has as a direct consequence impulsivity and acting on the spur of the moment. This proclivity goes along with generalized disinhibition in behavior, irrespective of others' potentially negative reactions. For instance, powerful individuals do not hesitate to invade others' spaces and do not shy away from physical contacts during conversation and face-to-face interactions. In addition, they do not restrain their ideas and emotions, and act in accordance with their mood and personality. Along with this trend, many empirical findings emphasize that power-driven approach can lead towards unethical behavior, in that powerful individuals, compared with the powerless ones, are found to be more inclined to misbehave in several domains (Van Kleef et al., 2011).

To the contrary, individuals lacking power, compared with those feeling powerful, are more sensitive to the behavioral inhibition system. Lacking power means having poor or null control over valued resources. This exposes the individuals to the whims of the environment, to material and psychological damages, and to social disapproval and reprimand, deriving from potential failures in acting. For this reason, low-power individuals respond more than others to threats, punishments and constraints set by others, as well as to prospective breakdowns and negative consequences (Keltner et al., 2003).

Specularly to what happens for high-power individuals, the lack of power triggers the tendency to see themselves as potential instruments for fulfilling others' goals. Being used to not control freely the resources they need, low-power people perceives the latent instrumentality embedded in human relationships to their own disadvantage.

Therefore, powerless individuals are inhibited in social interactions, since they barely express their opinions and they are very vigilant in undertaking actions that may bother other people. Signs of this compulsion are the actions of facial muscles aimed at inhibiting and masking the most sincere emotions, such as clamping the lips (Keltner et al., 1998).

More generally, the empirical findings concerning the approach/inhibition tendencies suggest that power prompts the correspondence and the congruence between one's personality and overt behavior. This condition is conceptually similar to the one supported by other states of disinhibition, such as the euphoria deriving from alcoholic intoxication, and anonymity (Hirsh et al., 2011). Indeed, each of these states shrinks the bearing of the Behavioral Inhibition System (BIS), since it diminishes the salience of multiple and concurrent goals. Not only does the BIS respond to threats and the suspicion of punishment, but it is also brought into play whenever it is activated a motor response to contrasting goals (J A Gray & Mcnaughton, 2000). Hence, when there is conflict between multiple objectives, anxiety and attentive vigilance represent the means used by the BIS to interrupt the current activities in order to individuate and isolate the most appropriate course of action for the situation (Hirsh et al., 2011). In this perspective, disinhibition refers to the state by which the relative strength of concurrent motor responses is decreased, such that the most salient action can occur without the interference of the BIS.

The salience of the available responses can be determined by either chronic internal dispositions of the individual, or by strong environmental and contextual cues. Disinhibition prioritizes the most salient response, both when the most salient response comes from internal pressures (in which case disinhibition reveals the person), and when it is elicited by external pressures (in which case disinhibition has the individual act in accordance with environmental affordances).

High-power states, similarly to the states produced by drunkenness and anonymity, all would result – through different paths – in getting the individual disinhibited, since they all ensure that the conflict between contrasting goals is not recognized, and so prevent the BIS from being alarmed. The drunk circumvents the inspection of the BIS because the alcoholic intoxication temporarily impairs attentional

resources, obscuring the cues for less salient actions and letting accessible just the most accessible response. Acting in anonymity also determines an insufficient activation of the BIS, since it decreases the concerns about the social desirability of one's own actions and so diminishes the activation of responses coherent with these concerns.

Sense of power is another of these disinhibiting mechanisms, which acts through the activation of the Behavioral Approach System (BAS) and thus increases the weight of the most salient response as compared to other responses. Indeed, the BAS and the BIS generally maintain an antagonistic relationship, such that the activation of one of the two systems decreases the activation of the other (Corr, 2002).

Hence, the BAS can be employed as a means to reduce the sense of anxiety triggered by the BIS or at least it can be activated to react to threats of environmental uncertainty (McGregor, Nash, Mann, & Phills, 2010). Anyways, the activation of the BAS is not the only mechanism through which subjective power could neutralize the BIS. The greater responsibilities deriving from having power can overload attention and deplete cognitive resources (Fiske, 1993). Furthermore, since power-holders depend less on others and do not care so much about their action being socially approved, sense of power may also disinhibit by removing moral constraints (similarly to anonymity-driven disinhibition; Galinsky et al., 2015).

2.3.4 How attentive is the powerful?

Interesting conclusions can be derived from the assumptions that sense of power satisfies a basic need for control (Fiske & Dépret, 1996; A. Guinote, 2007a, 2017). People deprived of power try to restore an acceptable level of control over the environment, by committing to greater information-seeking and broadening the attentional focus in an attempt to grab diagnostic information. To the opposite, high-power individuals already have optimal control and are not motivated to boost it. This gives them the freedom to pursue their goals and to narrow the attention on the priorities dictated by the situation.

Therefore, the need to feel one's own goals as determined by one's true self and actions, and not by external forces, would drive the effects of power on cognition. In this perspective, the Situated Focus Theory of Power (A. Guinote, 2007a, 2010; A. E. Guinote & Vescio, 2010) suggests that the power-holders are free to concentrate on the primary factors driving cognition²⁴, do not have the urgency to process all the available information, and thus can disregard secondary aspects of the situation. Selective and parsimonious information processing is reflected, for instance, in an experiment conducted by Guinote (2007b). Subjects were shown, on a computer screen, some grabbable objects (e.g., a cup), varying as for both the vertical positioning (e.g., upright or upside down) and the horizontal positioning (e.g., with the handle that could be grabbed by the right hand or the left hand). Participants were simply asked to recognize the vertical position of the object, and thus whether it was standing up or not, by pressing a button respectively on the left or the right of a keyboard. Thus, the horizontal positioning was irrelevant for completing the task. Nonetheless, participants that had been temporarily induced in a powerless state responded more quickly when the hand used to push the button and the handle of the object shared the same position, left vs. right, than when the positions were incompatible. For example, they were quicker in responding with their right hand when the object on the screen had the handle on the right side, than when the handle was on the left side. These subjects were misled by the affordances of the objects, which activated grabbing movements, even if they were not relevant for completing the task. Instead, high-power subjects had the same speed in responding, regardless of the position of the handle.

Similarly, powerless subjects demonstrated impaired accuracy on incongruent trials of the Stroop Task (P. K. Smith, Jostmann, Galinsky, & van Dijk, 2008).

²⁴ There are different factors driving cognition: environmental cues (possibilities of interaction offered by the environment), expectations, perceptual information, goals, temporary or recently used constructs, and chronic constructs (A. Guinote, 2007a). Each of these factors can be more salient at a given moment and draw the individual's attention, calling for being processed. For instance, seeing a protrusion in a wall, on which it would be easy to sit, it is likely to strike the attention and activate the sitting movement, beyond the individual's actual desire to sit. In a similar way, goal-related information (e.g. information concerning lunch) will be prioritized compared with irrelevant information or information concerning concurrent goals, not salient at the current moment.

Not only are powerful individuals more selective in attention, but they also are more flexible in changing and broadening or narrowing the focus of attention depending on the various situational conditions. Therefore, powerful individuals do not necessarily process information in a selective and parsimonious way each and every time, but they can adapt and widen the attentional focus if it is required by the situation. Instead, powerless individuals have to consider each time more information, also background and irrelevant information, in addition to focal constructs. For example, in an experimental task subjects are asked to watch a square including a vertical line, and subsequently they are asked to draw in a blank square a line of the same size as the first (A. Guinote, 2007b). However, the blank square is not necessarily equal in size to the first square presented. High-power participants are more accurate than low-power participants in drawing a line similar to the first one, irrespective of the size of the square. Coherently with the selective attention hypothesis, powerful subjects show to disregard background information, while focusing on the information necessary to successfully complete the task (namely, the size of the line shown in the first square). However, if the subjects are asked to draw a line that is, in reference to the blank square, in the same proportions as the first line is with regard to its square, then the situation changes. In fact, in this experimental condition, low-power and high-power subjects are equally accurate in drawing a line of the appropriate size. Hence, while low-power individuals process relevant and irrelevant information with equal effort even when they try to ignore peripheral information, high-power individuals are more flexible. In fact, they manage to inhibit background information when it is not functional to the task at hand, but they are also able to activate that information when it is needed to accurately accomplish a task.

Thus, powerful individuals' cognition is mold on the most salient situational factors, either when these factors are internal constructs or environmental affordances (Willis & Guinote, 2011). In seasonal behavior for example, powerful subjects are found to form more work-related intentions in weekdays and more leisure-related intentions in weekends (A. Guinote, 2008). Furthermore, their reliance on the most

accessible situational cues is reflected in their tendency to construe judgements based on the ease of retrieval²⁵ of mental constructs. For example, ease-of-retrieval in generating arguments favoring an opinion increases powerful individuals' agreement (compared with powerless subjects) toward that opinion (Weick & Guinote, 2008).

In general, sense of power enhances executive control. However, high-power individuals are flexible, in that they can release executive control and let lower-order cognitive processes, such as learned scripts, guide them when the situation calls for it.

Greater selectivity characterizes not only powerful individuals' cognition, but also their reasoning. In fact, sense of power elicits single-mindedness and goal-directed behavior, whereas powerlessness makes the individuals inclined to causal attributions, even unrelated to the focal goal, and thus keep active more paths at the same time.

Even the speed of responses is enhanced by sense of power, because of selective processing. Considering less sources of information for the task at hand prevent slowdowns. Therefore, attention selectivity represents another way for sense of power to activate the BAS (Deng, Zheng, & Guinote, 2018). However, sense of power activates a particular type of approach motivation, related to the achievement of the goals (A. Guinote, 2017). In fact, approach motivation is not monolithic but rather multi-faceted, and has different dimensions (Alcaro, Huber, & Panksepp, 2007; Corr & Cooper, 2016), two of the most prominent of which are liking and wanting (Berridge, 2007; Salamone & Correa, 2012). Liking concerns pleasure as incentivizing force, whereas wanting refers to clarity of focus and appetite to reach own goals and implementing the appropriate course of actions. In fact, explicit rewards are not the only things that

²⁵ Ease of retrieval of experiences/feelings occurring during the judgmental process represents a type of experiential information that is frequently at odds with declarative information (that concerns the features of the judgement's target). For example, requesting participants to recall a few (an easy task) instead of many (a difficult task) experiences of previous assertiveness usually results in participants rating themselves as more assertive. Participants infer their assertiveness from the easiness in recalling past episodes of assertiveness, while – if they were to use declarative information – they should have inferred to be less assertiveness (Schwarz et al., 1991).

promote action (according to the principles of operant conditioning), but also attempting to achieve a goals and the prospective achievement of them represent incentives and energizing forces *per se*. In this perspective, the expectation to reach a goal is sufficient to energize and motivate the behavior in an appetitive manner. On the basis of these considerations, power would be associated to a type of approach motivation driven not (only) by the hedonic quest for pleasures external to the goal, but rather by the goal *per se*, i.e. wanting, and by the effort to achieve it, i.e. seeking (Deng et al., 2018; A. Guinote, 2017). Subjective power frees the individual from the constraints to action and so it frees cognitive resources, allowing her to commit to achieving her desires. Therefore, rather than being accompanied by hedonic reward-seeking, sense of power increases approach motivation and action orientation through selective processing and enhanced prioritization (A. Guinote, 2007b, 2017). Furthermore, the missed link between power and positive mood testified by many studies (Galinsky et al., 2003; Rucker & Galinsky, 2008; P. K. Smith & Bargh, 2008; P. K. Smith & Trope, 2006) could be justifiable in light of the fact that powerful individuals are not necessarily moved by reward seeking, but rather by goal-driven attention and effort.

2.3.5 Is the powerful selfish?

In the realm of social relationships, sense of power shapes the way in which the individuals prioritize the self and the others. In the Agentic-Communal Model of Power (Rucker et al., 2012) it is argued that agency and communion (Bakan, 1966; Kurt et al., 2011) are the two axes that alternatively orientate social behavior on the basis of the individuals' subjective power. Thus, agency and communion are two fundamental modalities that organize the way in which people interpret and interact with the social

environment they are plunged in. Agency-oriented individuals²⁶ perceive themselves essentially as agents aimed at self-protection, self-expression and self-expansion. Consequently, they tend to express dominant acts and avoid submissive acts. To the contrary, communion is the orientation to considering oneself as part of a bigger group (e.g. the family, the church, the corporation, the nation, etc.) and so to taking others into account in judgements and decisions. This orientation implies a greater attention towards others and reluctance not to consider the social consequences of one's own actions, and so it results in an altruistic propensity in social relationships. However, communion orientation is disjointed from the valence ascribed to specific group members: instead, it refers to the tendency to include others in one's own decision, beyond the intentions (good or bad) toward others (Rucker et al., 2012).

Possessing power represents an essential discriminating factor that addresses the individual on the way of agency. Holding a high hierarchical position implies that the individual does not have to depend on (and comply with) other people to undertake her own interests. The lack of bonds with the environments encourages the internalization of the preference for the self (vs. others). In other words, a high sense of power is associated with the agency orientation and the tendency to prioritize the self and its expression. To the opposite, powerlessness entails a communion orientation and makes the individual sensitive to social ties and the group she is embedded in (Rucker et al., 2012). Since those that are down in the hierarchy cannot disregard others to satisfy their needs, they tend to always take others into account when making decisions.

There are several empirical findings that go along with this dual view in the interpretation of social relationships. Action orientation itself, typical of power-holders, and elsewhere justified by the BAS

²⁶ The concept of agency discussed in this paragraph refers to the orientation opposed to communion, and it is not to be confused with the sense of agency discussed previously with regard to perceived autonomy (i.e. one of the key component beliefs of sense of power), even if the two concepts are somehow overlapping. Indeed – it is worth repeating – perceived agency (or autonomy) refers to the degree of freedom from external conditioning perceived by the individual in initiating actions directed at fulfilling her desires. This set of beliefs represents a precondition for the agency orientation, intended as a tendency to preserve the self and not including others in the decisions concerning the self.

activation, can also be explained here in terms of agency (vs. communion), at least in the realm of social behavior. Hence, environmental conditions being equal, the individuals that do not care about the repercussions of their actions on the others are more prone to act, because their objectives are seen as overriding compared with the desire to project on others a positive image of the self. This argument coincides with the one discussed previously about the fact that the conflict between one's actions and their social desirability can alarm the BIS, and so inhibiting action.

2.3.6 Power and self-perception

Within the domain of self-perception, power has been shown to enhance how positively people view the self, increasing for example self-esteem and the better-than-average effect²⁷ (Wojciszke & Struzynska-Kujalowicz, 2007). In a similar vein, experiential manipulations of power have been found to induce people to see themselves as taller and to select a taller avatar to represent themselves in a videogame (Duguid & Goncalo, 2012). Other experimenters reported that high-power participants rated a pen's monetary value as higher when they had been told that the pen was for them to keep (D Dubois, Denton, & Rucker, 2011). The magnified view of the self might be fueled by the greater sense of control and approach motivation of the power-holders.

Power has been linked to illusory control, which refers to the perceived ability to influence outcome that are beyond one's reach²⁸ (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009). In fact, the multiple cues within the environment related to having control inflate power-holders' sense of control. In one experiment

²⁷ The better-than-average effect is the bias by which people tend to judge their abilities, behaviors and features as above the average and thus to evaluate them more favorably than those of the others (Benoît, Dubra, & Moore, 2015).

²⁸ A clear example of illusory control is believing of being able to influence outcomes that are largely dependent on chance.

participants were promised a reward if they had been able to guess correctly the outcome of a single roll of a six-faced die, and they were also allowed to choose to roll the die themselves or to have someone else roll the die for them. Obviously, whoever made the roll could not affect in any way the outcome, which is a random event. Nevertheless, virtually all high-power participants chose to roll the die themselves, whilst only 58% of low-power participants made that choice (Fast et al., 2009).

Correspondingly, it turns out that an anthropomorphized slot machine are perceived as less risky than a not anthropomorphized one by powerful individuals (Kim & McGill, 2011). High-power subjects perceive greater illusory control and are even more willing to play on anthropomorphized slot machines. Just arranging three small rectangles on the upper part of the machine to form two eyes and a mouth (anthropomorphization) was sufficient to detect the effect. To the contrary, low-power gamers perceive the not anthropomorphized slot machine as less risky and thus are more willing to play with it. The authors also check for the reverse influence of perceived risk on perceived anthropomorphism, and verify that high-power subjects see an entity as more human when it provides advantageous outcomes (instead of entities that provides disadvantageous outcomes) and that the opposite is true for low-power subjects. In sum, these findings show that power-holders' proxy control (over other humans) fuel their illusion of control, even on inanimate entities clearly driven by chance.

Power is also positively associated with overconfidence, which is an inflated sense of confidence in the accuracy of one's knowledge and estimates²⁹ (Fast, Sivanathan, Mayer, & Galinsky, 2012). Overconfidence has been explained in terms of amplified self-control. However, Magee and colleagues (2010) provide a different explanation of the phenomenon, based on psychological distance and abstract processing. Indeed, psychological distance diverts people's attention from concrete details (which may potentially be constraints on the way to one's desires) and makes them more confident in their expectations.

²⁹ Overconfidence is defined as an inflated sense of confidence in the accuracy of one's knowledge and estimates. For example, people can exaggerate the precision of their estimates by providing too narrow a confidence interval when asked to estimate a given quantity (Russo & Schoemaker, 1992).

By virtue of their confidence, powerful individuals are also less scared by difficult tasks. For example, sense of power might moderate the impact of promotion framing on consumers' price perceptions (C. Choi & S. Mattila, 2014). Price-based promotions are usually presented in one of two formats, percentage-off or dollars-off. The former framing method should imply greater effort on the consumers to calculate the discounted price. Indeed, powerless consumers perceive significantly more saving and show significantly higher purchasing intention with dollars-off promotions than percentage-off promotions. Powerful consumers instead are indifferent to the format of the promotion. This effect is mediated by confidence in estimating the promoted price.

Furthermore, powerful individuals are more inclined to expect positive and favorable in the future to happen. Namely, power increases optimism (Anderson & Galinsky, 2006). For instance, compared with low-power individuals, powerful people tend to judge as more likely the events more desirable and beneficial to themselves (e.g., "having your achievements displayed in the newspaper" and "having your home double in value in 10 years"), and instead to judge as more unlikely the negative events (e.g. "having gum problems"). In addition, enhanced optimism drives proclivity to risk independently from people's general tendency – predicted by the Prospect Theory (Tversky & Kahneman, 1981) – to risk aversion for gains and to risk seeking in the domain of losses (Anderson & Galinsky, 2006). In fact, optimism pertains to the subjective probabilities assigned to future events and it is conceptually independent from framing the outcomes as gains or losses and from the diminishing marginal utilities applied to either gains or losses in the value function³⁰. Therefore, powerful individuals, compared with the powerless ones, assign higher probabilities to positive possibilities and lower probabilities to eventual negative outcomes, irrespective of how the outcomes are valued or framed.

³⁰ Prospect theory states that both risk aversion in gains and risk seeking in losses are due to the diminishing marginal utilities of both gains and losses within the value function. In equivalent prospects framed as either gains or losses, people tend to prefer a sure gain of \$100 over a 50-50 chance to gain \$200 or to gain nothing (risk aversion), but they also tend to prefer a 50-50 chance to lose \$200 or to lose nothing over a sure loss of \$100.

Power holders have a greater propensity to incur in the planning fallacy, which is the tendency to underestimate the time it takes to accomplish tasks (Weick & Guinote, 2010). The authors argue that this happens because power prompts a goal-directed attentional focus and the tendency to ignore peripheral information (within which there also information about obstacles, past experiences, task subcomponents, etc.). However, the same tendency could be accountable in terms of increased psychological distance, that in turns make people concentrate more on desirability (as opposed to feasibility) features of future events.

At the same time though, sense of power is negatively associated with temporal discounting (Duan, Wu, & Sun, 2017; Joshi & Fast, 2013). The latter refers to the tendency to discount future gains, and so to prefer smaller immediate gains (e.g. \$100) over larger future gains (e.g. \$125). This tendency is generally attributed to a disconnection from one's future self. Power, instead, is thought to reduce temporal discounting. Therefore, powerful individuals are able to delay gratification and wait for larger benefit in the future. For example, even experiencing power just in the workplace predicted greater actual lifetime savings (Joshi & Fast, 2013). This is due to the power-holders having a greater connection with their future selves. Indeed, high-level construal orientation expands time horizons, which results in perceiving the distant future as being closer and imminent (Kantén, 2011). In addition, powerful people's augmented optimism reduces the subjective uncertainty and hypotheticality associated with the future³¹.

Enlarged confidence also contributes to explain the fact that sense of power exacerbates numerical anchoring effects (Lammers & Burgmer, 2017). People's judgements show undue anchoring bias when a previously evaluated numerical standard affects a subsequent numerical estimation. By way of example, in the now classic Tversky and Kahneman's (Tversky & Kahneman, 1974) paradigm, people are first asked if

³¹ However, it should be noted that a direct replication of Joshi and Fast's (2013) third experiment (testing between-subjects differences in non-monetary temporal discounting through preferences for gains in air quality) did not yield significant results (Heller & Ullrich, 2017). The authors of the replication question the ability of the episodic priming to "reliably produce a sense of power that would affect participants' decision making – especially when administered online" (Heller & Ullrich, 2017). This statement is based on the observation that the texts produced by participants in the priming task were too short (on average 264 characters) and took too little time (on average 197 seconds) to allow for the imagined situation to be truly experienced by participants.

the percentage of the African nations within the United Nations were more or less than 65% (high anchor) or more or less than 10% (low anchor). Then, they are asked to estimate precisely what percentage of the United Nations are African. It is a robust result that high-anchor participants' estimates are significantly higher of the estimates of participants in the low-anchor condition. Sense of power is shown to increase numerical anchoring for two interrelated reasons. Firstly, sense of power increases individuals' activation of goal-related information, while inhibiting irrelevant information. Thus, sense of power stimulates the activation of anchor-consistent information when people are confronted with the first numerical cue. Secondly, powerful individuals should be more likely to trust the accessible information and use it in their judgements and estimates.

The differential sensitivity to rewards and threats also leads to different decision-making strategies. High (vs. low) power consumers tend to adopt a choosing (vs. rejecting) strategy in decision-making (Mourali & Nagpal, 2013). In multi-attribute choice between two brands, powerful consumers direct their attention to the options' positive features, and thus tend to adopt a choosing strategy, while powerless consumers tend to focus on negative features, so adopting more easily a rejecting strategy. Coherently, powerful consumers are more satisfied when the chosen brand results from their adoption of a choosing strategy (vs a rejecting strategy), while low-power consumers are more satisfied with choices resulting from a rejecting strategy (instead of a choosing strategy).

Furthermore, Inesi (2010) found that power reduced loss aversion³² and did that not by increasing the anticipated value of gains but rather by decreasing the anticipated threat (negative value) associated with losses. Thus, independently of risk perceptions, powerful people expect negative outcome to be less painful and in this way are less loss averse in their choices. However, they do not exaggerate the value of positive

³² Loss aversion – also predicted by Prospect Theory – is the psychological principle that losses have greater hedonic impact than comparable gains. Once that outcomes are framed as either losses or gains relatively to a reference point, loss aversion is reflected in the steeper slope of the value function in the domain of losses compared to gains (Kahneman & Tversky, 2013).

outcomes. This confirms the deactivation of the BIS, but do not support the stimulation of BAS by high-power states.

Dampening anticipated threat is also determinant in choice deferral. In fact, deferring a choice is usually associated with less anticipated regret than choosing impulsively without considering potential drawbacks of one's choice. For this reason, people may be tempted to defer a risky choice. In this context, a greater sense of power should reduce anticipated regret and thus make consumers more likely to make an immediate choice instead of postponing it (Mourali, Yang, Pons, & Hassay, 2018). For example, powerful consumers are more likely – compared to low-power consumers – to choose between two digital cameras immediately, instead of postponing the choice. However, when it is choice deferral to be associated with greater regret, the previous pattern is reversed. For example, low-power consumers were more likely to buy immediately a present for a close relative's marriage, when they were left with just one potential better sale in the future before the marriage. In fact, in that case, postponing decision in hope of a future deal could have meant greater regret if the deal would not have materialized. To the opposite, powerful consumers were more likely to defer choice at risk of having to settle for a suboptimal choice in the only other buying occasion available in the future before the marriage.

2.3.7 Power and social cognition

Powerful individuals have a diminished ability to put themselves in someone else's shoes and to adopt others' perspective. For instance, if in an experiment high-power participants are asked to draw an E on their forehead, they are more likely to draw the E as if they were to read it themselves, producing a backwards E, unreadable by an external observer (Galinsky, Magee, Inesi, & Gruenfeld, 2006). Similarly, sense of power shrinks empathic accuracy, that is it makes people less able to determine the emotions underlying others' facial expressions (Blader, Shirako, & Chen, 2016; Galinsky et al., 2006). Moreover,

powerful people react less emotively to others suffering, and so they also end up not feeling sorry for them (van Kleef et al., 2008). Powerful people have also a more pronounced tendency to objectification, that is they are more instrumental in their attention (e.g., by attending to the attributes of others that are goal relevant, Overbeck & Park, 2001).

We already saw that high perceived power leads to a magnified view of the self. If you also consider the tendency to consider others instrumentally to one's own goals, you see that high-power individuals have a disparity between the value attributed to the self and the value attributed to others. This is reflected in opposing tendencies of low- and high-power individuals in allocating resources to the self or the others. For example, people with higher socio-economic status spend proportionally a smaller portion of their income for others (Kraus, Piff, & Keltner, 2011). Consumers temporarily induced in a high-power state are willing to spend more for a t-shirt bought for themselves than for one bought for others (Rucker et al., 2011). Low-power consumers show instead the opposite pattern, spending more for the t-shirt when it is viewed as a gift for others. In addition, the authors found that perceived self-importance (and not dependence on others) mediated the effect of power on consumers' spending on self (in monetary value), while perceived dependence on others (and not self-importance) mediated the effect of power on the dollars spent by consumers on others.

Powerful consumers perceive more price unfairness when they are made to pay more than other consumers are, whilst powerless consumers perceive a price as more unfair when it is higher than what they had paid in a previous occasion (Jin et al., 2013). Other-comparisons serve the powerful to fulfill her feelings of entitlement because they allow her to assess her position and dominance in the social dynamic. If others eventually manage to get a lower price for the same product, this represents a serious threat to the powerful consumer's self-importance. Instead, low-power consumers use self-comparisons (and not other-comparisons) as diagnostic tools of their self-importance. Their communal orientation prevent them from feeling uncomfortable with others receiving a better treatment than they did. Conversely,

intrapersonal comparisons are better suited to assess the status and self-importance of low-power consumers.

Higher power is associated with a greater tendency to stereotype others, and thus seek less diagnostic and individuating information about others and bear prejudice against out-group (Dépret & Fiske, 1993; Fiske, 1993; Goodwin, Gubin, Fiske, & Yzerbyt, 2000). Powerful subjects might use stereotyping information both by default – i.e. decreased attention to stereotype–inconsistent information, due to low motivation to pay close attention to others – and by design – i.e. increased attention to stereotype–consistent information allowing the powerful to control and box in others and to perpetuate power hierarchies (Galinsky et al., 2015; Wojciszke & Struzynska–Kujalowicz, 2007).

Multiple theories have provided different accounts of the tendencies showed by powerful individuals in social cognition. The disparity in the value ascribed to the self vs. others, the tendency to objectification, the empathic inaccuracy, and the lack of empathic concern can all be explained in light of agentic-communal tendencies, social distance and degree of motivation in interpreting irrelevant stimuli. For instance, stereotyping can derive from both automatic information processing and abstract thinking. By the first account, people with power might think about the social world in a less effortful, less deliberate, more top-down fashion than powerless people, especially when they are not motivated to interpret task-irrelevant situational cues. An indirect link from power to automatic information processing is also suggested by the approach/inhibition theory of power (Keltner et al., 2003). Automaticity would in turn result in a decreased attention to stereotype-disconfirming information and in a more simplistic social cognition.

However, another route to stereotyping has been proposed, one that does not imply automatic processing, but, to the opposite, a more effortful way of processing information. Indeed, Smith and Trope (P. K. Smith & Trope, 2006) support the abstraction hypothesis and argue that powerful individuals, given their greater (experienced or perceived independence), may have a greater sense of their distinctiveness and distance from the others, and so may be more prone to form more abstract construals of the available information.

Abstract processing is orthogonal to top-down or automatic processing, since it does not imply attentive disregard of details. The tendency of powerful perceivers to extract the gist from data, isolating the central and structural information, and so to categorize data at a superordinate level, is responsible for their tendency to rely on distinctive traits of others, i.e. stereotyping.

2.3.8 How the powerful reacts to power

Not only is power often conceptualized as the capacity to influence others, but a number of research findings have demonstrated that power psychologically protects people from influence. As a result, power affects the likelihood that people will express their true beliefs (Anderson & Berdahl, 2002). For example, Tost et al. (2012) found that power led people to discount the advice of both non-experts and experts. As we saw, those who are powerful are also more likely to rely on their own subjective experiences, such as ease of retrieval, when forming judgments (Weick & Guinote, 2008). In negotiations, powerful negotiators are made by their own anger to focus their attention and claim value, whereas powerless negotiators are more influenced by their counterpart's anger, which derails them from what they are trying to achieve (Overbeck, Neale, & Govan, 2010). Consistently, gratitude appeals by firms are shown to act only on powerless customers, making them engage in corporate social responsibility (CSR) initiatives with matching donations. To the opposite, gratitude appeals have no significant effect on powerful customers' attitudes and behavioral intention to engage in CSR practices (Mattila, Wu, & Choi, 2016). Sense of power moderates the effects of belongingness vs uniqueness advertisements by Airbnb on click-through intention and purchasing intention, such that powerful customers were more sensitive to uniqueness appeals, while powerless customers' intention increased in response to belongingness appeals (Liu & Mattila, 2017).

Greater creativity is also congruent with powerful individual's independence from others. Not only are they less influenced by the ideas of others, but they also produce more novel outputs (Galinsky, Magee,

Gruenfeld, Whitson, & Liljenquist, 2008). The authors also emphasize a paradoxical effect of the greater perceived freedom in choice prompted by sense of power. If asked to write a counter-attitudinal essay³³, powerful subjects perceive more choice than powerless subjects and – as a result – experience greater cognitive dissonance, that in turns drives greater post-task compliance toward the statement they were initially opposed to³⁴.

2.3.9 Behavioral and motivational tendencies of powerful and powerless individuals

As for the behavioral tendencies elicited by power states, high-power people present themselves more effectively, both orally and in writing (Lammers, Dubois, Rucker, & Galinsky, 2013). They perform better in motor-based activities, such as dart throwing (Burgmer & Englich, 2013). Enhanced approach motivation translates in the action orientation of powerful individuals. For example, compared to powerless consumers, powerful consumers are more keen to brand switching, even when satisfied with their current option (Jiang et al., 2014). However, this effect holds only as long as brand switching is associated with more action than not switching. Indeed, when switching is associated with less action than non-switching – e.g. when sticking to one’s beloved brand involves driving a lot of kilometers to reach one’s trusted store – then powerful individuals seem to prefer not to switch brand compared with powerless people.

Powerful individuals are also more likely to engage in risky behavior (Anderson & Galinsky, 2006) and in cheating behavior (Lammers, Stapel, & Galinsky, 2010; Yap, Wazlawek, Lucas, Cuddy, & Carney, 2013). Interestingly, powerful individuals are more likely to cheat, but only when their misleading behavior can benefit themselves, whilst powerless people are more likely to cheat when it can benefit others (David

³³ Participants may be asked for example to write a piece in defense of something they do not agree with (such as defending the destruction of a forest).

³⁴ This study has inspired the first experiment described in chapter 3.

Dubois, Rucker, & Galinsky, 2015). For example, in one experimental scenario, participants learned that they had made a purchase from Starbucks, and that the cashier had incorrectly given them an extra \$10. High-power consumers were more likely to keep the money when the scenario described the purchase as done with the participant's own money, while low-power consumers were more likely to misbehave when they had apprehended that they had done the purchase on behalf of a friend (that would have been the beneficiary of the extra ten dollars).

Nonetheless, a recent study in tourism management (S. Choi, Mattila, Van Hoof, & Quadri-Felitti, 2017) reports a different set of results, quite in opposition with previous research on powerful people's involvement is cheating behavior and on communal orientation of powerless individuals. In fact the authors show how powerless customers are more likely to write a fake review when presented with a monetary incentive rather than a charity incentive, while powerful customers are not influenced by the incentive type. This findings are explained in terms of the more concrete mindset activated by powerlessness states in which self-interest (elicited by the monetary payment) is seen as a more proximate concern than ethical principles (sensitized by the charity incentive).

In addition, powerful individuals are more prone to take on assertive action across a variety of situations (e.g. making the opening argument in a debate or making a first offer in a negotiation; Magee, Galinsky, & Gruenfeld, 2007).

The effect of power on motivation is twofold for high-power and low-power individuals. Possessing power facilitates goal pursuit, since it increases the correspondence between goals on one hand and behavior that would satisfy those goals on the other (Galinsky et al., 2003). Power leads to the increased speed in responses of tasks related to goal pursuit (A. Guinote, 2007b), requires less information to make decisions, entails greater task performance and flexibility. Whitson et al. (Whitson et al., 2013) found that goal-directed behavior is, at least partially, driven by powerful individuals paying less attention to constraints or obstacles in the environment. Once that power-holders are sufficiently motivated by a goal, power promotes goal-directed behavior and self-regulation of effort. In fact, high-power subjects are found to

push harder and outperform low-power subjects on motivating tasks, even in conditions of depletion of attentional and cognitive resources, i.e. ego depletion (DeWall, Baumeister, Mead, & Vohs, 2011).

A low-power state triggers the motivation to restore power and control (i.e. power motive). When the control over valued resources is impaired, the individual is kept in an unpleasant state and is motivated to get out of it. In this perspective, powerless individuals seem to have a heightened accuracy and impression motivation in information search (De Dreu & Van Kleef, 2004), driven by the need to restore a sense of control over the environment (Fiske & Dépret, 1996; A. Guinote, 2017).

States of powerlessness are also related to status seeking (Rucker & Galinsky, 2008), in a way that is functional to a more general need to acquire power. Since status is frequently associated with power and higher hierarchical positions, powerless individuals may be tempted to gain status in the eyes of the others as a means to satiate their control or power motive. Consumer products constitute a vehicle to convey one's status to others. For example, luxury products derive their appeal to consumers not from their instrumental value, but rather because of their symbolism signaling status. In light of this reasoning, it looks clear that powerless consumers will try to acquire luxury products, because they expect that these products can give them back the sense of power they lost. Indeed, experimental results show that participants primed in a temporary powerless state were more willing to pay for luxury products (irrespective of the price tiers the products were in), compared with high-power participants and participants in the control condition. This preference was expressed also for a picture that was just described as a limited-edition available only for a short period of time. When the same picture was framed as a mass-produced picture available to everyone, powerless subjects were not more willing to pay for it than the other subjects. Mediation analysis confirmed that the effect of sense of power on the willingness to pay more for a luxury product was mediated by the perception that the luxury product would have provided them with an increased sense of power (Rucker & Galinsky, 2008).

Other researchers have been able to conceptually replicate the effect of power on compensatory consumption, by manipulating the scent emanated in a store (Madzharov, Block, & Morrin, 2015). Warm-

(vs. cool) scented retail environments were perceived as more (vs. less) social dense, and this in turn affected customers' perceptions of greater (vs. lesser) need for power. In essence, the scent was employed as a priming tool, instilling certain levels of sense of power. Therefore, in warm-scented stores customers' preference for (and purchase of) premium and luxury products/brands was significantly higher compared to stores infused with cool scent.

Conspicuous consumption – i.e. purchasing and consuming objects that signal status and wealth in search of social approval – can also be seen in the preference of low-power consumers for bigger products (e.g. larger food options; Dubois et al., 2012). This preference is even exacerbated when the social visibility of consumption is greater. In addition, this preference is motivated by status seeking, so much so that it is reversed when the size-to-status relationship is reversed (i.e. when it is small size that conveys high-status).

Similarly, it has been found that powerlessness fosters an accentuation bias, by which the representation of valued objects is systematically altered (David Dubois, Rucker, & Galinsky, 2010). That is, powerless participants overestimate the size of objects associated with monetary value, such as quarters of dollars, poker chips, etc. In addition, this accentuation bias grows with increasing monetary value associated with the objects: so a \$10 dollar poker chip looms even larger to low-power individuals than a \$1 chip. However, when the size-to-value relationship was reversed (i.e. smaller objects were more valuable), powerless subjects drew those objects smaller, not larger. Because of compensatory processes stimulated by powerlessness, low-power people seem to intensify the subjective value of monetary objects and to distort the visual representation of those objects in the direction of the size-to-value relationship.

Sense of power moderates the influence of the other customers' dress-style (informal vs formal) on the customers' approach behaviors (e.g. willingness to stay longer in a restaurant, interact with other customers, etc.) and word-of-mouth (WOM; C. Choi & Mattila, 2016). Namely, powerless customers are more likely to display approach behaviors when the other customers' dress style is formal (conveying status), while powerful customers' intentions are unaffected by the dressing style.

The driving force represented by the power motive is also analyzed with regard to people's money saving patterns (Garbinsky et al., 2014). In general, powerful individuals are motivated to secure their higher social position by increasing the amount of money deposited in bank. However, depending on different types of motivation underlying saving behavior, this tendency can be attenuated or even reversed. When the reason to save is to secure one's current state, powerful consumers will save more than non-powerful ones. In addition, this tendency will be so much greater, the more unstable one's power position is perceived to be. Instead, powerless individuals will save more than powerful individuals when the money saved is intended to acquire status-related products.

In a series of studies, Rucker and Galinsky (2009) tested concurrently the distinct psychological motives triggered by high and low power states. Powerful consumers attend to functional utility and look for superior performance in products (even in luxury products). They are instrumental in attention and goal-oriented in evaluating products, seeking utilitarian features that better suit their objectives. Instead, powerless consumers are appealed by higher status products and so engage in compensatory conspicuous consumption in an effort to grasp control and catch up with others' level of power. For example, high-power consumers expressed more favorable attitude toward a Parker pen when it was advertised with a hard sell strategy, namely a strategy emphasizing the pen's quality. Conversely, low-power consumers expressed more favor to the same pen when it was presented with a soft sell advertisement that highlighted the pen being related to status.

Of similar kind are the findings of another research, that highlights how low and high power consumers respond differently to top-dog and underdog brand positioning appeals (Jin & Huang, 2018). Top-dogs appeals are used in marketing and advertising to emphasize the leadership of a brand, on the basis of some dominant advantage (such as abundance of resources). Underdog strategies imply an explicit acknowledgement of a brand as being the number two of the market, that usually tries to challenge the leader or to differentiate from it for some peculiar feature (such as precision of delivery, or simply passion). Top-dogs are more appealing for low-power consumers, that see in this kind of brands an opportunity to

regain power. Underdogs, instead, are more appreciated by high-power consumers, that have already satiated their need for power and rather look for ways to express their power in dominant behaviors. Supporting or purchasing from disadvantaged players in the marketplace may be a way to display one's sway and dominance.

2.3.10 Moderators of sense of power

Sense of power does not operate in a monolithic fashion. Both the ways in which people experience power, and the multiple and often contrasting effects of power, are better understood if moderating variables are taken into account. Such variables can moderate both how specific manipulations or measures of power influences sense of power, and also how sense of power itself impacts on downstream psychological functioning and behavior (Galinsky et al., 2015).

Firstly, it has to be considered that power reveals the person, since it increases the correspondence between one's internal states (e.g. personality traits) and behavior. Therefore, individual differences moderate the effects of power. For instance, priming high-power increases the probability of self-serving behavior only for individuals that already have an exchange orientation; instead, high power individuals with a communal orientation show an enhanced tendency to generosity (S. Chen et al., 2001). Comparable reversals in typical main effects of power occur in case of mismatches between people's power states and their chronic hormonal profile or their chronic sense of power. Low-testosterone individuals show negative physiological reactions and worse cognitive performance when put in high-power positions (Josephs, Sellers, Newman, & Mehta, 2006). At the same time, discrepancies between a temporary and chronic power states impair the link and the congruency between self-reported emotions and traits (S. Chen, Langner, & Mendoza-Denton, 2009).

Power also increases the correspondence between one's behaviors and the relevant goal activated at a given moment. For example, powerful people's tendency to stereotyping others can be offset by the activation of a person-centered goal, as opposed to a product-centered goal (Overbeck & Park, 2006).

The legitimacy of power is a variable generally classified among the antecedents (bases) of power (French, Raven, & Cartwright, 1959) and instead should be viewed more as a power attribute influencing the stability of power over time³⁵. This variable affects the stability of power while moderating the downstream consequences of power on both the powerholders and those on which the power is exerted.

Legitimation comes from the belief that the power holder has the formal right to have available the valued resources. Legitimacy is a property of a power hierarchy, and it derives from the existence of an explicit explanation of the differences in power between roles. If a power role is dictated by the social structure, it is endowed with a great legitimacy and it will be harder for others to demolish it. Similarly, an individual receiving a mandate of power or directly designated by an authoritative subject can enjoy a certain level of legitimacy. Otherwise, a power position can be justified by the common values of society. Having certain characteristics is seen in a given culture as deserving of power. For example, in many cultures, the elder is legitimized to arrange the behavior of the youngest people (French et al., 1959). In addition, power illegitimacy can derive not only from the illegal appropriation of a power position, but also from abuses in exercising power continuatively (Galinsky et al., 2015). The fact that power is justified prevents sentiments

³⁵ In their traditional classification of the bases of power, French and Raven (1959) individuate five such bases, which in turn define five different kinds of power: reward power (whose basis is the ability to reward others), coercive power (grounded in the ability to punish and deprive others of resources), legitimate power (founded on values internalized by the group members about the right of a given subject to have power), referent power (based on the degree of identification of the others with the power-holder) and expert power (derived from competence). However, in the words of Fiske and Berdahl (2007), "French and Raven's reward and coercive power is power, period." Rewards and coercion are indeed embedded within the definition of power as asymmetrical control over valued resources. In addition, legitimacy is more an attribute of power, rather than an antecedent of power. Finally, only reference (i.e. status) and information (i.e. competence) can constitute true bases of power. However, as we will see, these variables also affect the stability of power positions and thus act as important moderators of sense of power.

of revenge towards power-holders. To some extent, group members feel to be guaranteed against potential abuses of power, as long as the power-holder legitimately exercises power. Thus, legitimate power has generally a longer life of the illegitimate one.

In fact, legitimacy and stability are similarly implicated in reversing the positive association between sense of power and approach tendencies (Jordan et al., 2011; Lammers et al., 2008). This happens because power-holders in unstable power positions tend to engage in defensive processing and behavior to secure their position, while individuals in unstable low-power positions experience greater reactance and power motivation.

The identification with the power holder (status) is another expediter of social power, that acts by increasing the emotive burden of the powerless in eventually interrupting the relationship with the powerful.

Actually, perceived legitimacy, status, and competence all act similarly in moderating the effects of power while affecting the perceived stability of sense of power. In addition, powerful individuals' feelings of incompetence or impaired status make them feel delegitimized and act in demeaning and aggressive ways toward others (Fast & Chen, 2009; Fast, Halevy, et al., 2012). "Power frees those who lack status to act on the resentment from lacking respect by demeaning others" (Galinsky et al., 2015). Similar considerations apply to power-holders lacking power and, more generally, legitimacy, and thus feeling unstable in their roles.

Finally, Rucker, Hu and Galinsky (2014) propose that some of the effects of power may change and even reverse if individuals focus on the expectations of power (schemas and scripts associated with how those with or without power behave). Most of the research on sense of power has dealt with the experience of power (the internal psychological and physiological tendencies activated by having or lacking power). Nevertheless, with little twists to the traditional episodic recall task used for priming sense of power, the

authors manage to manipulate alternatively the experience of power or the expectations³⁶ of power and test their differential impact on information processing, status seeking and action orientation. Coherently with previous research, a focus on the experience of power makes low-power individuals process information more carefully and show a stronger preference for status-related objects. However, it is generally the powerful, and not the powerless, that is expected to make important decisions and possess status. Hence, focusing on the expectations of power will cause high-power individuals to process information more carefully and prefer higher-status products. As for the tendency to act, power produces more action irrespective of whether the individual focuses on the experience or the expectations of power, since power-holders both desire and are expected to act.

³⁶ In addition to asking to recall an episode of power (powerlessness), the expectations of power are primed by asking also to indicate the name of the role held and to “describe what other people generally expect from someone in this role or similar roles and the stereotypes associated with this role.” (Rucker et al., 2014)

CHAPTER 3: How sense of power affects consumers' evaluative judgements and decisions: the empirical studies

3.1 Overview of the experiments

In the previous chapter, several effects of power have been described, along with possible mediating and moderating variables. In this section, I report three experiments that, while connecting to previously literature, investigate the consequences of sense of power in three areas relevant to the consumer domain, i.e. attitude formation, decision-making, and behavioral tendencies.

The first experiment aims at individuating the role of cognitive dissonance in driving evaluative judgments and attitude compliance. Following the counterattitudinal advocacy paradigm, participants are instructed to defend the position that climate change is not dangerous and is not serious. High- and low-power subjects show different level of attitude change after completing the task. Different managerial implications are drawn from these findings, of particular interest for firms operating in controversial industries or dealing with sustainability issues.

The second experiment deals with predecisional distortion in choosing between two travel destinations, evaluating them by attribute. Powerful decision-makers seem to be less biased in making judgement, at least in the context of multiattribute binary choices. Once again, cognitive dissonance (as opposed to cognitive consistency) may play a decisive role in differentiating between high and low-power individuals. I also discuss the importance of unbiased decision-makers for marketing analysts.

The third experiment is concerned with assessing consumers' power-driven action orientation through the willingness to self-production, an on the edge variant of customerization. The results confirm the greater

tendency to action of powerful consumers, but also highlights the motivational forces activated by powerlessness states.

3.2 How sense of power affects attitude shifting in an induced-compliance paradigm

Powerful individuals are generally less constrained by social information and others' opinions. They can afford greater freedom in personal expression, and their behavior and speech show greater correspondence with their internal goals and traits. In fact, they are selective in their attentional focus, and show greater attunement and adherence to whatever factor (internal or environmental) is made salient in a given situation. At the same time, their enhanced approach motivation sustains their sense of self-importance and their goal-driven efforts.

For these reasons, it may seem that the powerful's attitudes are always immune to external influences. However, high-power individuals' information processing and evaluative judgments (i.e. attitudes) are very often driven by intrapsychic cues and experiential information (such as ease of retrieval), at least to the extent that these signals are goal-relevant. Relying on goal-focused internal cues can also lead to paradoxical effects, such as post-advocacy compliance in a counter-attitudinal task. In this experimental paradigm, participants are asked to defend a position that they are opposed to (for example, they are instructed to write an essay defending an unpopular or infamous decision made by some institution). After they completed the essay, participants are asked to rate their agreement with the controversial decision. It turns out they tend to review their previous belief in the direction of the position that they defended. High-power subjects show an even greater compliance with the previously opposed position. This effect is believed to be due to the cognitive dissonance arising while writing the belief-discrepant essay.

3.2.1 Conceptual background and hypothesis development

Cognitive dissonance and attitude compliance

Cognitive consistency refers to the agreement, coherence, or fit between related beliefs/representations. In psychological research, it is usual to refer to the negative version of cognitive consistency, i.e. cognitive dissonance. The latter is the lack of coherence between related beliefs. The importance of this concept for psychology is mainly related to the motivational force that is believed to be linked to the level of cognitive consistency. Indeed, a state of cognitive dissonance is associated with psychological discomfort, such that the individual in such a state will try to restore some level of consistency. It is in this sense that previous investigators talk about desire for consistency as one of the fundamental psychological needs (A.-S. Chaxel, Russo, & Wiggins, 2016). One of the way in which cognitive dissonance has been traditionally investigated is the induced-compliance paradigm (Festinger & Carlsmith, 1959). Within this framework, a counter-attitudinal task is used to drive cognitive dissonance, which in turn triggers compliance toward the controversial attitude. For example, an individual may be asked to write an essay on a topic on which she holds strong beliefs. Suppose she is radically adverse to capital punishment, and imagine a circumstance in which instead she is required to defend capital punishment. At this point, the internal representation of her advocacy of capital punishment will rebel against her private strong opposition to it. Indeed, at least in our culture, if one believes "X" he will publicly defend "X". Hence, here we have two incompatible beliefs, i.e. the individual's private belief and her cognition about her actual public statement. The dissonance arising from these contrasting beliefs can be reduced by changing one of them in the direction of the other. Since the representation of the overt advocacy of the argument is more rigid, while the private opinion held on the same argument is more malleable, the individual should react by changing her private belief in the direction of advocacy. The magnitude of this change is dependent on the amount of cognitive dissonance perceived in the counter-attitudinal task. In turn, cognitive dissonance will be so much bigger as greater it is the number of reasons the individual can find to justify her own behavior. In fact, having publicly stated

“not X” is incoherent with the internal belief “X”. To the opposite, it is coherent with the cognitive processing of the reasons, pressures, threats of punishments and promises of rewards that would have induced her to defend “not X”. For example, it has been shown that the greater the reward given to advocating the opposed position, the greater the perceived dissonance, and the greater the change of the previous opinion. Also, the perception of choice in implementing the counter-attitudinal behavior has been found to moderate the impact of this behavior on the arousal of dissonance: the less freedom subjects perceive in implementation, the less is the dissonance arising from their behavior.

Sense of power, persuasion and induced compliance

More recently, the perception of choice has been indirectly manipulated by priming sense of power (Galinsky et al., 2008): even in a uniform low choice condition, powerful individuals tend to ascribe to themselves more choice than is warranted. Hence, priming power has the same moderating role in arousing dissonance and in subsequently shifting attitude as manipulating choice has. The authors also verified that freedom in choice (measured with a self-report scale) truly mediates the relationship between sense of power and attitude shift. Namely, sense of power influenced perceived choice and this in turn affected attitude compliance.

However, this previous study did not involve a control group, in which sense of power would not be manipulated. Thus, it was impossible to assess if differences in compliance between powerful and powerless subjects were driven by high-power inducing more compliance, or by low-power inducing less compliance, or even by both these tendencies.

Perceived freedom in attending to a request should be positive correlated to perceived power. Hence, it is not only powerful individuals to feel greater choice in responding to a request, but low-power individuals also should perceive, for the opposite tendency, less choice than it is actually provided by the situation.

In order to assess if the entire range of variation of power affects compliance to the same extent, I introduce in this experiment a control group, that should have a neutral level of perceived power. This addition to the experimental design allows to enrich the research hypotheses in the following way:

Hypothesis 1a. High-power individuals show a greater attitude compliance toward the controversial statement than the control group and the low-power group.

Hypothesis 1b. Low-power individuals show less attitude compliance toward the controversial statement than the control group and the high-power group.

In this study, I go one step further, by employing a not task-related method to prime a cognitive consistency goal³⁷ (A.-S. Chaxel et al., 2016) and by evaluating concurrently the effects of priming power and cognitive consistency goal on attitude compliance, and the interaction of the two effects.

Manipulating cognitive consistency with an independent task can provide additional evidence to the hypothesis that the driving factor of attitude amendment is truly an impairment of the cognitive consistency goal, i.e. cognitive dissonance. In fact, subjects that are primed with the goal of cognitive

³⁷ In Chaxel et al. (A.-S. Chaxel et al., 2016) and in Chaxel and Russo (2015), priming cognitive consistency as a goal is distinguished from priming cognitive consistency as a mindset. Indeed, cognitive consistency is primarily intended as a goal, motivated by a discrepancy (dissonance) between the desired level of consistency and an inadequate current perceived level. As such, an effective method to prime consistency as a goal ought to instantiate in individuals' mind precisely that discrepancy between perceived and desired consistency, so as to activate the objective to reduce that discrepancy. However, the goal of consistency is associated with a cognitive procedure (mindset) that aims at decreasing potential dissonance and organizing systems of ordered and coherent beliefs. Hence, activating the mindset related to the consistency goal would require different methods from those suited to the activation of the goal itself. For instance, asking subjects to solve a series of anagrams could effectively prime such a mindset, since it would create momentum to apply the same cognitive procedure to different contexts. Goal priming and mindset priming respond differently to the introduction of a delay (filler task) immediately after the priming: while delaying the satisfaction of the goal for some minutes is proved to enhance the goal activation, a delay could instead diminish the readiness to apply the mindset to subsequent situations.

consistency and then complete the counterattitudinal task are expected to revise their beliefs to an even greater degree than the subjects that are not primed with the consistency goal and only undertake the counterattitudinal task. More formally, this translates in the following hypothesis:

Hypothesis 2. The group primed for the cognitive consistency goal shows a greater tendency to comply with the previously opposed statement, than the group not primed for the same goal.

3.2.2 Method

Participants and design

For this study, 271 subjects (95 men and 175 women, 1 missing response) were recruited on Amazon Mechanical Turk, upon payment of \$1.00. The experiment involved a 3 (power: *baseline* vs. *low-power* vs. *high-power*) X 2 (consistency: *control* vs. *consistency prime*) X 2 (manipulation order: *power prime first* vs. *consistency prime first*) between-subjects factorial design.

Procedure

Manipulation order

The primes of power and consistency were administered in different orders to participants: half of the participants received first the power manipulation and then the consistency manipulation, while for the other half the order was reversed.

Sense of power

Power was manipulated through an episodic recall procedure (Galinsky et al., 2003). Participants in the high-power condition were asked to remember a situation in which they had power. Participants in the

low-power condition were asked to remember a situation in which someone else had power over them. Participants in the control group of the power manipulation were asked to remember their last grocery shopping. This last manipulation was used to level out the control-group participants on a neutral experience, without direct implication of power or powerlessness feelings.

Cognitive consistency prime

I primed a cognitive consistency goal, by asking subject to solve a conundrum (A.-S. Chaxel et al., 2016; Russo & Corbin, 2016), that was unrelated to the attitude targeted by the counter-attitudinal task. Specifically, participants were asked to explain a conflicting set of facts, namely “Why do people buckle their seatbelts more diligently in airplanes than in automobiles when statistically airplanes are safer than automobiles?” Participants were instructed to answer in at least 3 minutes (i.e. they would have been able to proceed only once that 3 minutes had passed) and to provide explanations that went beyond the obvious answer. They were also told that, if they really could not come up with even one good answer, they could have typed something like “I just couldn’t explain why”.

Participants assigned to the control group of the consistency prime were asked to solve a simplified version of the conundrum, not involving one of the two conflicting facts. The problem was presented as a seemingly spontaneous event that they had to explain. In particular, they were asked: “Why do people buckle their seatbelts very diligently in airplanes?” In addition, these participants were allowed to provide an answer in not less than 3 minutes.

After this task, both participants in the control and manipulated condition had to watch an unrelated 3-minute video (an excerpt from a Charlie Chaplin video), that was intended to exacerbate the consistency goal elicited in the previous passage. This delay after the activation of the consistency goal is a standard tactic adopted to increase the activation level of the goal by frustrating its achievement for a brief period. The rationale for having also the control participants go through this delay was to equate the effort with the primed condition.

Counter-attitudinal advocacy

Next, all the participants were introduced to a controversial topic. They were described the effects of climate change and were reminded that there are fringes that reject the view of climate change as something that truly represents a real risk to humanity. These fringes rather see climate change as a hoax, invented by other political/economical lobbies to pursue 'obscure' interests.

On the following page, participants were explained that past research had shown that 'one of the best ways to understand the relevant arguments on any issue is asking people to write an essay favoring only one side'. For this reason, they were asked to write the strongest, most forceful essay that they could taking the position that greenhouse gas emissions are not a major problem and that steps should not to be taken to limit them. The subjects had no time limit to complete the essay, but they had to use at least 400 characters.

Dependent measure

Once they completed the essay, participants rated their accordance toward the statement "Global greenhouse gas emissions should not be reduced" on an 11-point scale, anchored from "Strongly disagree" to "Strongly agree", with the mid-value (6) labelled "Neither agree nor disagree". Therefore, higher values on this scale indicated a greater agreement and compliance toward the controversial attitude (i.e. higher values indicated greater attitude shifting from the previous alleged disagreement with the statement).

Control measures

Differently from other works on induced-compliance, the topic over which participants had to debate did not uniformly generate negative reactions. Indeed, the idea that climate change is a hoax is strongly rooted in some people, not only in politicized fringes. So, in order to take into account the variability on the dependent measures, I employed a political orientation index (Skitka, Bauman, & Sargis, 2005) as a control variable. This index was made of four questions, with which participants indicated their liking/disliking of political conservatives, political liberals, democrats, and republicans, using 0-to-10 feeling thermometer. An index of left-right orientation was obtained by averaging the difference between participants' liking of

liberals and conservatives, and the difference of their rating of democrats and republicans. Greater values on the final index indicated a liberal (as opposed to conservative) tendency.

3.2.3 Results

A 3 (power) x 2 (consistency) x 2 (order) between-subjects ANCOVA on the attitude toward the necessity to deal with greenhouse emissions, with the political orientation as a covariate, revealed a marginally significant main effect of power, $F(2, 255) = 3.008$, $p = .051$, and a significant effect of political orientation, $F(1, 256) = 41.832$, $p < .0001$ (*Table 5*). In addition, political orientation – measured as propensity toward leftist positions – was negatively correlated with the dependent variable ($B = -0.215$, $SE = 0.033$, $t = -6.468$, $p < .001$). No other main or interaction effect was significant. It comes with no surprise that there is a negative correlation between the tendency to be liberal/left-wing and the tendency to agree with the fact that global gas greenhouse emission are not a serious problem. Indeed, seeing climate change as a hoax is a common position maintained by the far-right against left-wing lobbies.

Table 5 – Between-Group Effects (ANCOVA)

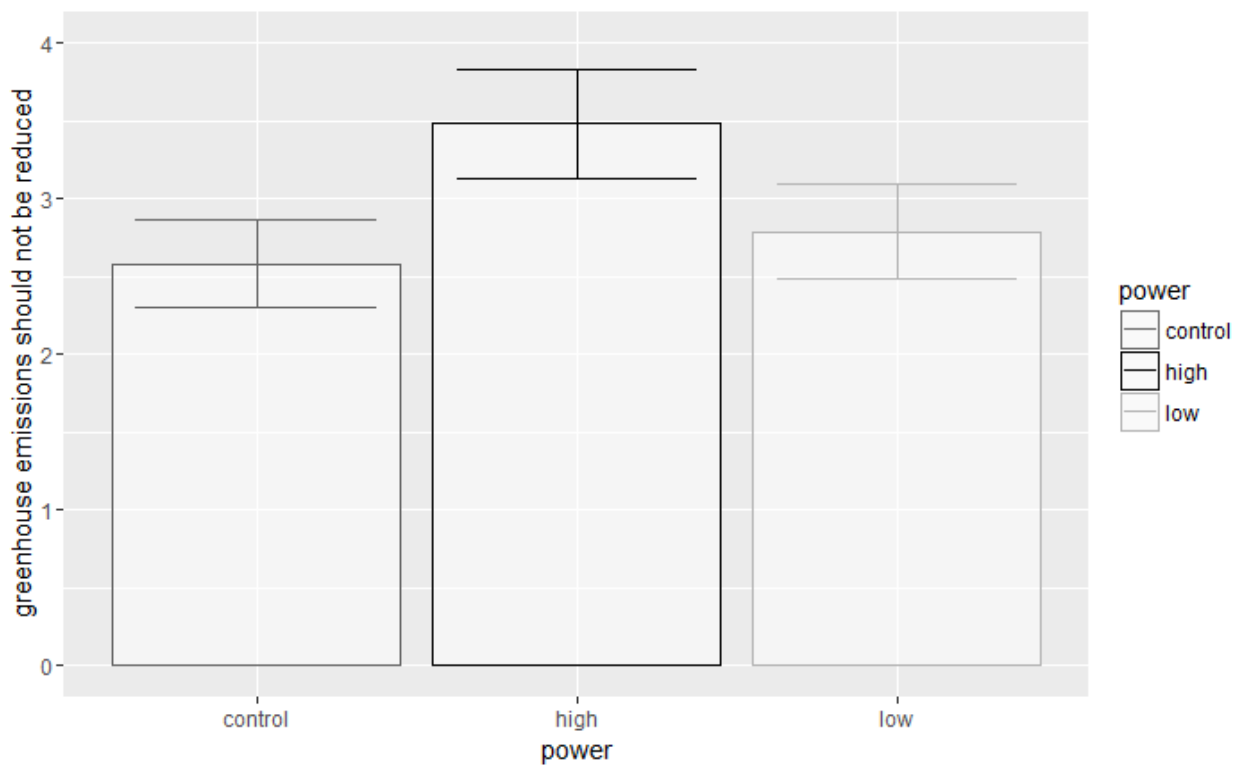
Dependent Variable: Agreement with the statement “Greenhouse emissions should not be reduced”

	Type II Sum of Squares	df	F	Sig.
political orientation	314.038	1	41.832	0.000 ***
power	45.165	2	3.008	0.051 †
consistency	3.319	1	0.442	0.507
order	0.594	1	0.079	0.779
order*consistency	0.659	1	0.088	0.767
order*power	11.911	2	0.793	0.453
consistency*power	5.268	2	0.351	0.704
order*consistency*power	11.442	2	0.762	0.468
Residuals	1929.339	257		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

However, the main interest of this study was in compliance differences between power groups. Therefore, decomposing the main effect of power on the attitude measure (*Figure 1*), it emerges that high-power participants agree significantly more ($M=3.48$, $SD=3.24$) with the controversial statement than low-power participants ($M=2.79$, $SD=2.84$), $t(255)=1.93$, $p=.05$, and baseline-power participants ($M=2.58$, $SD=2.69$), $t(255)=2.32$, $p=.02$. In *Figure 1*, this pattern of means is represented graphically, along with the standard errors bars. The difference between low-power and baseline-power participants is instead not significant ($t < 1$). This confirms hypothesis 1a and disconfirms hypothesis 1b. Thus, the main effect of power is driven mainly by the greater tendency of high-power subjects to agree with the controversial attitude.

Figure 1 - Controversial attitude means by groups of the power factor



In addition, hypothesis 2 is also surprisingly not confirmed, since the main effect of cognitive consistency (primed with the independent task) is not significant. Maybe this is due to the fact that the counter-attitudinal task already produces an optimal level of dissonance, so that any previous activation of a consistency goal does not significantly increase further the attitude shift.

3.2.4 Discussion

The experiment's results are quite conclusive on the fact that the more powerful individuals are also more influenced by the counterattitudinal task, since they revise their alleged position on climate change to a

greater extent than the other experimental groups. In addition, through the introduction of the control group, the experiment allows to exclude that the observed differences in previous studies between high-power and low-power individuals be due to low-power individuals' resistance to attitude change. In fact, the low-power group has a tendency to shift attitude similar to that of the neutral group. It is instead the high-power group to have a proclivity to revise opinions after the counterattitudinal task, since in this group attitude compliance is greater than in the control group. This is somehow hard to explain if the only possible mediator of the relationship between power and attitude compliance is perceived freedom. In fact, perceived freedom is expected to grow linearly with increasing levels of sense of power. If this is true, then perceived freedom in turn should affect linearly attitude compliance. However, this is not what current results show. Consequently, there could be an alternative and complementary explanation of attitude shift, beyond perceived freedom. For instance, it could be that powerless people interpret the instructions of the counterattitudinal task as advices that climate change is not so much a serious problem. Since powerlessness is associated to advice taking, low-power individuals could be tempted to comply with the opinion provided by the task instructions. This tendency to attitude compliance driven by advice taking could offset the opposite tendency (to not comply) driven by low perceived choice. This could explain why the low-power condition is not significantly different from the control group with regard to counterattitudinal compliance.

Another finding is the disconfirmation of hypothesis 2 about the expected main effect of the independent manipulation of the goal of cognitive consistency. The expected effect would have provided further evidence to the role of the consistency goal as the main driver of counterattitudinal compliance. Therefore, the disconfirmation of hypothesis could be due to a threshold to cognitive dissonance, such that once that dissonance is sufficiently higher, any additional impairment of consistency does not add up to the effect on attitude shifting.

3.2.5 Managerial implications

The findings of this experiment provide useful suggestions about the strategies that the marketers can adopt to stimulate the agreement of consumers and the general public to controversial topics. If consumers are made to actively and explicitly defend a position that they deplore, perhaps within a simulated situation, or because they are tempted to credit tentatively the opinion they oppose, it is likely that later they will review their previous attitudes by showing greater agreement with what they were contesting. However, even for marketing professionals, persuading powerful consumers or other influential people to take sides in something they are strongly opposed to can be a daunting task. A promising strategy involves appealing journalists in the specialized press and leading them to express more compliant and less harsh standpoints, on the pages of newspapers. For example, a company operating in the tobacco industry, which is strongly opposed by groups defending public health, could aim to gain the support of the media. As highlighted in the experiment, those who perceive themselves as powerful feel they have greater freedom of choice and autonomy even in activities that are actually directed by others. So the counterattitudinal advocacy goes hand in hand with a paradigm of persuasion that calls for the active participation of the recipients, and ultimately their self-persuasion (Miller, 2017). The persuader's job is just to have the recipients prepare and present publicly a speech discrepant with their internal beliefs. To this end, the aforementioned tobacco company might use public relations campaigns specifically addressed to media, specialized press, and in particular to the big names in journalism (that allegedly have greater perceived power of novices). There are different ways in which the company can kick off public speeches advocating relevant positions. For example, within an event organized by the firm, the public relations specialist might encourage a public debate around the fact that scientific data proving cigarettes' harmfulness are inconclusive, or that cigarettes have an essential recreational and social role. If the bystanders are encouraged to consider and speak aloud tentatively also the positive sides of discrepant positions, they could subsequently revise the strong opposition that they have towards tobacco. Powerful subjects may be

particularly sensitive to this self-persuasive process. Therefore, it may be useful to involve in these discussions some celebrities, which in turn might spread more favorable climate within the public opinion.

Alternatively, a firm could directly host some pieces of authoritative journalists on its house organ. Within the context of a single-party business journal, the journalist is likely to limit her critic voice and write a piece less argumentative or even favoring the firm's perspective. And, since saying is also believing, especially if who says is also powerful, then the journalist in the future may mitigate her opinions on the company's conduct.

Instead, the company should be careful in asking real advertorials upon payment, calibrating them on the importance of the recruited journalists and on the economic relevance of the rewards. Indeed, a too high incentive might serve as self-justification for the journalist that accepts to write the advertorials, mitigating the cognitive dissonance arising from lying publicly, and so dampening the self-persuasion effect. Which is why the company should balance the reward (e.g. award-trip) on the credibility of the journalists (e.g. head director). With regard to this, it may be even more appropriate to bestow the rewards before asking for advertorials, in such a way that the memory of the received gift is somehow faded and is not perceived as contingent upon the requested service.

Finally, the firm can turn to the consumers with higher sense of power, such as opinion leaders and market mavens operating in the interpersonal informal cliques (parental, friendship, and working networks). As for this, referral marketing is the most well-fitting tool (Berman, 2016; Buttle, 1998). Referral programs involve rewarding existing customers for bringing in or advising new customers. It is not uncommon that even unsatisfied customers opportunistically make stimulated referrals, in order to get the rewards. To the extent that the incentive is not disproportionately big, even giving counterattitudinal referrals can results in the well-know self-persuasion effect (Kuester & Benkenstein, 2014). This firm strategy should pay off even more with powerful customers (i.e. opinion leaders), that are more sensitive to post-referral attitude change, and may be even more willing than other customers to make referrals to express their dominant behavior. In addition, powerful customers have been shown to be more opportunistic and more likely to

cheat, especially when their misconduct can benefit themselves. Hence, they can be particularly prone to make stimulated referrals, even if these happen to be at odds with their internal dissatisfaction with the firm's products. For these reason, it may be even more promising for the firm to reward opinion leaders with free samples of products, because the cognitive dissonance deriving from accepting this kind of deal should results in even greater post-referral compliance.

3.3 When the powerful reflects carefully: how sense of power affects the pre-decisional distortion of information

In decision-making, it is essential to formulate unbiased value judgements in evaluating different pieces of information before getting to a final decision. Unfortunately, most of the people seem to be affected by predecisional distortion of information, since they let the attractiveness of an option on an attribute influence their evaluation of the subsequent attribute. Sense of power may determine individual differences in this tendency. Decision-makers in a high power state direct the focus of attention selectively toward goal-relevant situational information, making their value judgements less biased. Alternatively, they could be more sensitive to the temporary leader alternative established in the early stages of the decision process, and so they could incur in even greater predecisional distortion. This experiment puts these concurrent hypotheses to test, by having participants with different level of power go through a multiattribute binary choice between two travel destinations to book for.

3.3.1 Conceptual background

Biases in value judgements and predecisional distortion of information

Predecisional distortion of information occurs when a decision maker, while evaluating information prior to a choice, interpret new evidence as favoring the alternative that is currently leading in attractiveness. For example, a decision maker may have to choose between two candidates to hire. The candidates are compared sequentially on a list of attributes (e.g. past performance, experience, gender, level of education, teamwork, etc.). The decision maker rates the relative attractiveness of the options on each attribute. Even if the decision maker has no prior preference, whatever candidate is leading in attractiveness after the evaluation of a given attribute (for example, the education level) will make the decision maker distort the rating of attractiveness of the candidates on the subsequent attribute (for example, the propensity to teamwork) to support the temporary leading alternative.

As the word “predecisional” suggests, this type of bias occurs before the decision maker forms any definitive preference. All that is necessary in order for predecisional distortion of information to take place, is that a tentative preference (i.e. an alternative temporarily regarded as more attractive) is made. Indeed, once that such a leading alternative is established any subsequent piece of information will be illegitimately evaluated as favoring the leader.

The difference between a final leading alternative – namely, the alternative that is selected once that the choice process has terminated – and a temporary leader – one that emerges during the evaluation process, when the choice has not happened yet – is subtle and has determined part of the confusion arising from the concept of predecisional distortion of information. In fact, this bias requires to adopt a process paradigm in studying decision making³⁸, such that the pre-choice evaluation process can be taken into account.

³⁸ For an examination of how the predominant input-output paradigm initially obscured some of the findings concerning predecisional distortion of information, see Russo (2014).

In judgement of likelihood, a similar concept is the desirability bias, which makes the preferred outcomes also look as more likely. Comparable phenomena exist in the domain of value judgements. For example, attitude polarization might arise when people with opposing views on an argument, for example deforestation, review the exact same piece of information (Kuhn & Lao, 1996). People opposing deforestation become even more opposed, whilst people favoring deforestation become even more in favor. This happens because of the greater scrutiny that disconfirming information goes through, compared with confirming information. This phenomenon has been elsewhere called disconfirmation bias (Edwards & Smith, 1996).

At the end of a decision process, the chosen option may distort post-choice information, making it appear as favoring more the leader alternative (the chosen one) than the other one. This postdecisional distortion occurs in order to reduce the cognitive dissonance that might eventually arise from evidence highlighting the faults of a decision. For long time, distortion was believed to kick in only after the choice was terminated (i.e. postdecisional distortion) and not before the decision maker definitely selected one of the alternatives (i.e. predecisional distortion) of information. Indeed, following Festinger, no distortion could occur while the evaluation process was still in act, since no leader could have established yet. However, predecisional distortion postulates just the fact that, even if no alternative has been definitely selected, it is indispensable for the judge, while comparing the alternatives by attribute, to establish a temporary leading alternative in attractiveness.

In the previous cases, evaluations end up being biased because of a prior preference affecting subsequent judgements. However, what is of interest for the present study is just the case of distortion of information when there is no pre-existing preference that biases evaluation. It only suffices that one of the alternatives becomes prominent in attractiveness for a moment. In this sense, predecisional distortion is similar to other previously studied effects, i.e. the halo effect and the primacy effect. We talk about the halo effect, when an individual's overall evaluation of an object erroneously affects the evaluation of specific attributes

of that object. For example, a company's good reputation for its effort in sustainable production may reverberate on the favorable evaluation of the product quality.

Primacy effects refer generally to the influence that information acquired earlier in a judgement process exerts on information received at later stages. There are two main types of primacy effects. One occurs when information received earlier is weighted more heavily than information received later. The other kind is configural primacy, which occurs when evidence acquired later is distorted to support whatever opinion has been formed up to that point. Thus, in the latter type of primacy, it is not that the weight (i.e. importance) of attributes processed later is varied, but instead it is the inherent value of later information about attributes that is changed, while the weight may remain unchanged. In other words, configural primacy is a stable interaction between two attributes, such that once that the first attribute is interpreted as strong (weak), the second attribute will be interpreted as positive (negative). To appreciate the difference between these two kinds of primacy effect, consider for example a consumer evaluating two bags by attribute. The consumer may weigh the first attribute (e.g. size) as more important of an attribute processed as second (e.g. color). This would be an instance of the first type primacy effect. Instead, to stick with our example, the consumer is biased by configural primacy if the perceived value of the color of the alternatives changes depending on the value assigned to the bags in terms of their size. If bag A was perceived as superior in terms of size, then also the color of bag A will be perceived as superior; if it was inferior in terms of size, it will be interpreted as inferior also in terms of color.

Thus, predecisional distortion of information belongs to the class of the change-of-value primacy effects (i.e. configural primacy). However, it constitutes a special case within this category, since it does not refer to a stable interaction between attributes, but rather "a temporary change of perceived value in which that change is driven solely by the leading alternative. If the other alternative would have been leading, the next attribute would likely have been distorted in the opposite direction, that is, would have exhibited a different interaction." (Russo, 2014).

Predecisional distortion of information is a bias in value judgements occurring in sequentially processing two alternatives by attribute (Meloy & Russo, 2004; Russo, Meloy, & Medvec, 1998). While the alternatives are compared on the relevant attributes, the importance weights of the attributes may remain unchanged, but the leading alternative at any given time drives a temporary change in the relative value of alternatives on the next attribute.

Sense of power and predecisional distortion of information

The influence of the predecisional distortion of information is believed to be related, among other factors, to the pressing need to make subsequent judgements consistent with the previous ones (A.-S. Chaxel et al., 2016; Russo, Carlson, Meloy, & Yong, 2008). Different findings regarding high sense of power might at first glance suggest that it increases the need for consistency, especially in social cognition. For example, powerful people tend to discount both experts and non-experts' advices and especially when such advices disconfirm their previous beliefs. This might result from a heightened motivation to maintain high level of consistency in one's internal beliefs.

In addition, an examination of the literature concerning the relationship between power and accuracy in judgement would show that heightened sense of power intensifies some specific biases. Specifically powerful individuals would be more keen to incur the planning fallacy, to overconfidence and increased risk-taking. On closer inspection, all these distortions share the correlation with the improved optimism and independence from the environment driven by high sense of power. In turn, one could speculate that these instantiations of optimism might depend to some extent on the action of the need for consistency, in the sense that given evaluations are distorted to be made consistent with preferred outcomes (whether the favorite outcome is "I will finish the job by tomorrow" or "This slot machine will give me the winning combination of symbols").

The lack of dependence on others would be also the cause of specific types of inaccurate social cognition by high-power individuals, that is their tendency to social stereotyping and emphatic inaccuracy. This inaccuracies may also be driven by the need for making the perceptions of subordinates consistent with previous beliefs about them held by power-holders.

To the extent that the need for consistency actually mediates the relationship between sense of power and these biases, one could argue that the same need also mediates the impact of power on predecisional distortion. As such, priming sense of power may be hypothesized to exacerbate the magnitude of predecisional distortion of information, by making more compelling the importance of being consistent in decision, resisting to concurrent goals, such as accuracy of the decision's outcome.

However, the mediation role of the need for consistency has not been assessed yet. And different mechanisms may intervene to explain how sense of power increases the tendency to produce these biases.

In addition, states of low-power drive the need to be accurate in social perception, but nothing can be said at the moment about whether high-power are generally motivated by a similar, or rather opposed, drive in decision making. In fact, the cost associated with misperceiving other's hierarchical role or misreading their opponent's mind is heightened for low-power individual.

However, this higher need for accuracy is limited to social cognition and it is unlikely to transfer to other domains of cognition.

Alternatively, other mechanisms may suggest a negative impact of sense of power on predecisional distortion, such that high-power individuals display less distortion in a binary choice between two products or services. Indeed, power pushes goal-directed behavior, by creating a more direct correspondence between goals and the actions aimed at undertaking these goals. Power also accelerates decision-making, as it increases speed in responses to tasks related to goal pursuit, and selectivity and flexibility in attention (A. Guinote, 2007b). Following this path, predecisional distortion may rather be dampened if high sense of

power is manipulated before undertaking the decision process. The greater commitment to a decision's goal by high-power individuals might motivate them to select the best alternative in an unbiased way.

In addition, despite the need for accuracy in social cognition activated by powerlessness, low power individuals have been shown to perform poorly in executive tasks, compared with powerful subjects.

Therefore, given the previous considerations, the following hypotheses were formulated:

Hypothesis 1a. High-power individuals will show a lower predecisional distortion of information than participants in the baseline-power group.

Hypothesis 1b. Low-power individuals will show a greater predecisional distortion of information than participants in the baseline-power group.

In the traditional studies about predecisional distortion, a stable result is the relationship between confidence in the temporary leading alternative and the amplitude of distortion on the following attribute. That is, the greater the confidence in a leading option after the evaluation of the attribute j , the greater the distortion displayed in evaluating the options on the attribute $j+1$. There is no reason to hypothesize a different pattern for the present experiment. Thus, at least for participants in the baseline condition such a relationship can be maintained.

Hypothesis 2a. The confidence in the leading alternative on the attribute j directly influences distortion of attractiveness on the attribute $j+1$.

Hypothesis 2b. In the baseline-power group, confidence in the leading alternative on the attribute j directly influences distortion of attractiveness on the attribute $j+1$.

Given the hypothesized differences in mean distortion between the experimental conditions, it seems logical to conjecture that also confidence will have a differential impact on distortion depending on the level of power of subjects. In other words, there should be a significant interaction between power and confidence in influencing distortion scores on attributes. More precisely, the high power individuals should disregard their confidence about the attractiveness of an alternative on a given attribute while evaluating the subsequent attribute information. Therefore:

Hypothesis 2c. In the high-power group, confidence in the leading alternative on the attribute j does not influence distortion of attractiveness on the attribute $j+1$.

Low-power people should not be able to prevent distortion, and, at the same, to neutralize the impact of one of the main driver of distortion, i.e. confidence in the temporary leader. Thus:

Hypothesis 2d. In the low-power group, confidence in the leading alternative on the attribute j directly influences distortion of attractiveness on the attribute $j+1$.

3.3.2 Method

Design and participants

This experiment involved 155 participants (83 males, 63 females, 9 missing responses), recruited on Amazon Mechanical Turk upon payment of \$1.00. The experiment included one 3-level factor (power: *baseline vs low vs high*) and one additional control group used to provide an unbiased estimation of the diagnosticity of the attributes and that did not go through any power manipulation. Therefore, participants were assigned to one of four experimental conditions.

Procedure

Sense of power

Sense of power was manipulated using a hierarchical imagining role. High-power participants were asked to imagine being a boss in a company, while low-power participants had to imagine being an employee. Participants in the baseline-power condition and those in the variable-brand control condition did not have any prime of power.

Sequential choice process

After the power priming, all the subjects in the choice conditions (low power, high power and baseline power) undertook the sequential choice process. However, the variable brand control group faced a different version of the sequential evaluation process, in which they did not have to choose temporary leading alternatives and were not asked to select a final choice.

Participants in the choice conditions read a scenario asking them to imagine to have to pick up one between two hotel destinations for their older sibling's honeymoon. The alternatives had already narrowed down to only two, and the subject was asked to evaluate these options on one attribute at the time. There were six attributes on which to evaluate the destinations: weather, beaches, hotel accommodations, water activities, nightlife and other sights. For example, the description of the third attribute of the travel destinations recited: "The location you have reservations for at **Destination E** has a huge, ultra modern

hotel that is a couple of blocks away from the beach. The hotel has generously sized rooms and large indoor and outdoor pools. At this time of year the hotel usually holds activities for guests only by the outdoor pool. **Destination M** is an older, medium sized hotel that is right on the beach. The hotel has moderate sized rooms many of which have porches that overlook the ocean. It also has a small outdoor pool.” After reading each attribute describing the two destinations, participants were asked to rate the diagnosticity of just the information concerning that single attribute on a scale from 1 (“Strongly favors Destination E”) to 9 (“Strongly favors Destination M”) with 5 (“Neither Destination”) as midpoint. Then participants, considering all the information received up to that point, were asked to think of the decision process as a horse race and to indicate which of the two destinations they would consider to be in lead at that current time. After that, participants rated their confidence in the leading option being the eventual winner, on a scale between 50 (“Dead even - The destinations are neck and neck”) and 100 (“Clear winner – Definitely going to win the race”).

At the end of the presentation of the attributes, participants were asked to express a final binary preference between Destination E and Destination M, and their confidence in them having chosen the correct alternatives.

Participants in the variable-brand control group went through a different version of the previous stimuli. Firstly, the scenario they were presented with only stated that, in order to select to best destination for their older sibling’s honeymoon, they were going to see many brochures for travel destinations and that they would have been considering two destinations at the time. Each “brochure” corresponded to an attribute description, completely alike the one shown to the choice groups, with the only difference that each attribute description referred to a different couple of destination (e.g. Destination E / Destination M for the weather, Destination L / Destination T for the beaches, etc.). In this way, the variable-brand control group should not display predecisional distortion of information, and may provide an unbiased estimate of the diagnosticity of the attributes, calibrating the ratings provided by participants in the choice groups. Indeed, participants in the variable-brand control group were only asked to rate each attribute’s

diagnosticity, while they were not asked to choosing a leading alternatives nor to express their confidence in their choice.

Additional measures

Participants in the low and high-power groups were then asked to rate their feeling powerful vs. powerless in the hierarchical role (boss/employee) imagined previously in the experiment. Participants rated their feelings on seven semantic differential items using a seven-level scale.

3.3.3 Results

Manipulation check

High-power participants reported to feel marginally significantly more powerful ($M=.24$, $SD=.83$) than low-power participants ($M=-.20$, $SD=1.09$), $F=3.163$ $p<0.1$, in imagining the hierarchical role situation.

Predecisional distortion of information

The assessment of the pre-decisional distortion of information results from using the evaluation of attributes by the variable-brand control group to calibrate the evaluations of the other groups. If $Eval_{ij}$ denote the evaluation of $Attr_j$ by $Subj_i$, then absolute distortion was computed as $Eval_{ij}$ (choice condition) – mean $Eval_j$ (variable-brand condition) = $Diff_{ij}$. The final measure of distortion, $Distort_{ij}$, was created by signing $Diff_{ij}$ to indicate whether $Eval_{ij}$ supported (+) or opposed (-) the brand preference expressed after $Attr_{j-1}$ (i.e., just prior to seeing $Attr_j$). A positive $Distort_{ij}$ indicated that $Eval_{ij}$ favored the brand that was leading prior to seeing $Attr_j$.

The mean value of distortion over all attributes and all subjects was 0.861, and reliably greater than zero, $t(518)=7.806$, one-sided p-value $<.0001$. I also computed the averages of distortion across all the attributes

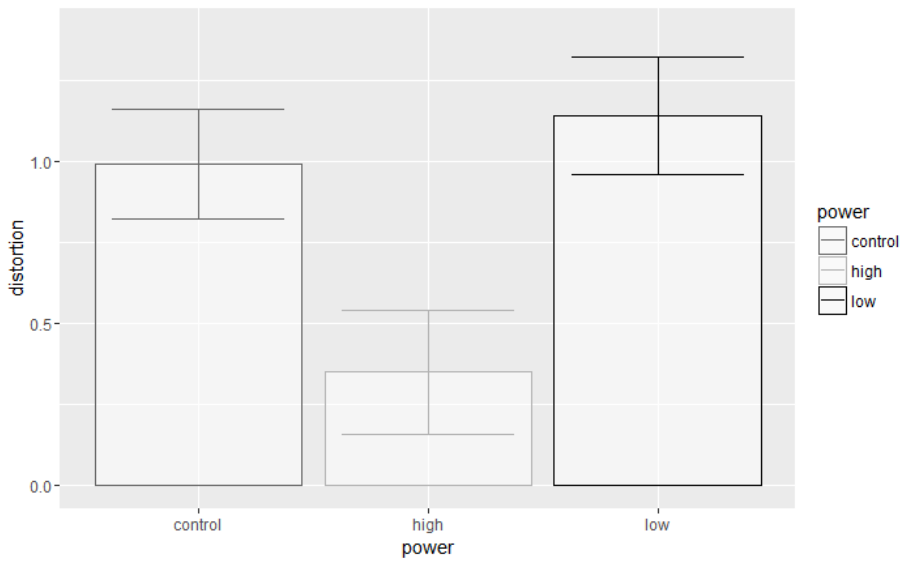
and within subjects, treating each subject as the unit of observation (*Table 6*). The mean of predecisional distortion of these values was almost identical to the previous result, namely 0.865, and still significantly greater than zero, $t(102)=6.231$, one-sided p -value $<.0001$.

Table 6 – By-attribute and overall distortion means (standard deviations)

	<i>beach</i>	<i>hotel</i>	<i>water</i>	<i>night</i>	<i>other sights</i>	Mean over all attributes and individuals	Mean distortion for each individual
<i>Baseline</i>	1.51 (2.25)	0.49 (2.92)	1.12 (2.25)	1.07 (2.43)	0.75 (2.54)	0.99 (2.49)	1 (1.38)
<i>Low power</i>	1.26 (2.49)	1.29 (2.78)	1.19 (2.24)	1.49 (2.44)	0.45 (2.6)	1.14 (2.51)	1.14 (1.53)
<i>High power</i>	1.11 (2.75)	-0.32 (2.45)	0.28 (2.34)	0.47 (2.54)	0.20 (2.27)	0.35 (2.48)	0.35 (1.19)

To test differences in distortion according to the level of power, I run a mixed-design ANOVA with a random intercept, on the predecisional distortion of information, with power (baseline vs low vs high) as independent between-subjects factor and the participants' ID as independent repeated-measures factor. The main effect of power was marginally significant ($F(2,101)=2.883$, $p=0.06$). Specifically and more importantly, this main effect was mainly driven by high-power subjects' tendency to distort information significantly less ($M=.35$, $SE=.26$), than the low-power group ($M=1.14$, $SE=.23$), $t=2.282$, $p=0.02$, and marginally significantly less than the baseline-power group ($M=.99$, $SE=0.22$), $t=1.902$, $p=0.06$ (*Figure 2*). Participants in the baseline-power group were not significantly different from those in the low-power group. The Levene's test for homogeneity of variance between groups gave $F(2)=0.71$, that was largely not significant ($p>0.40$), and so allowed to confidently assume similar variances between the groups.

Figure 2 - Between-group mean differences in distortion



As for the relationship between confidence and distortion, I regressed the distortion scores on attribute j on the confidence on attribute $j-1$. It turned out that confidence had a significant positive impact on distortion, $\beta=.171$, $t=3.948$, $p<.001$.

To test jointly the impact of confidence and power (and their interaction) on distortion, I run a mixed-design ANCOVA with a random intercept, on distortion, with power as fixed factor, participants' ID as random factor, and confidence as covariate.

Table 7 - Between-group effects (mixed-design ANCOVA)

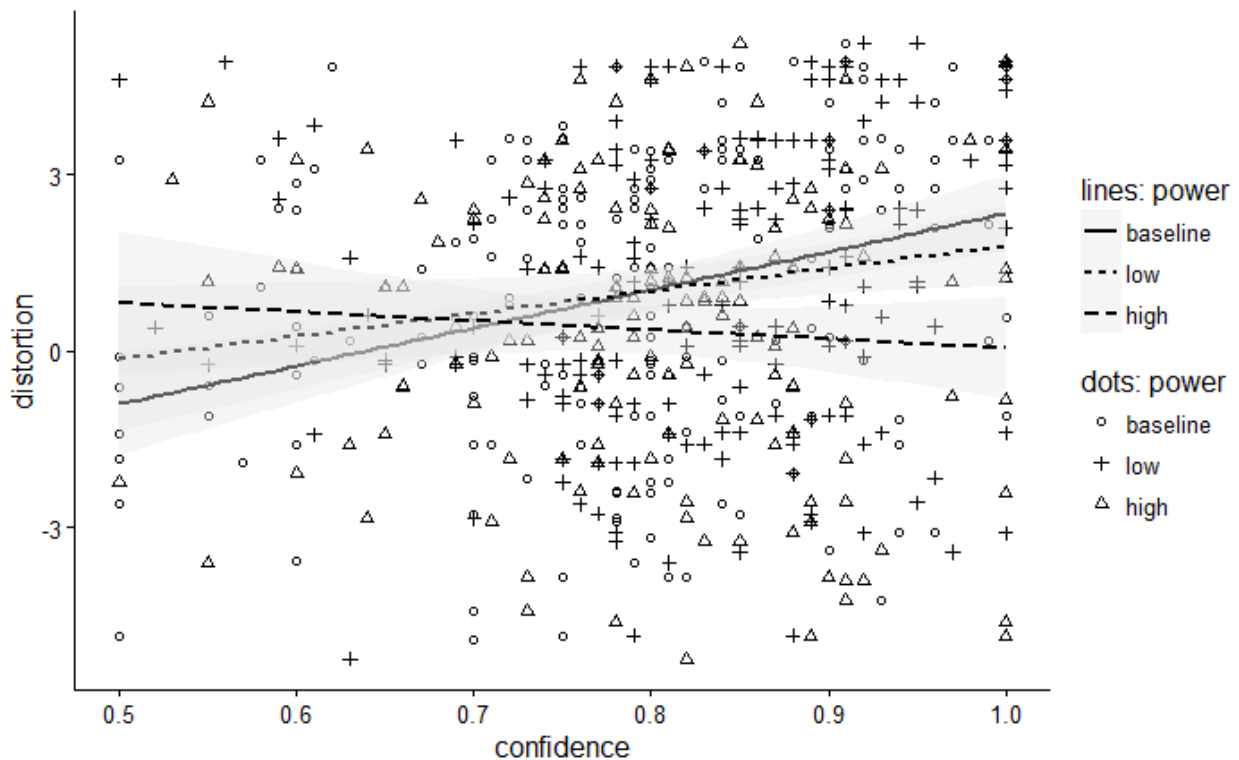
Dependent Variable: Distortion

	Sum of Squares	NumDF	DenDF	F	Sig.
power	40.852	2.000	225.155	3.737	0.025 *
confidence	24.625	1.000	227.694	4.506	0.035 *
power * confidence	51.538	2.000	230.525	4.715	0.010 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 '.' 1

Beyond the intercept, also the impact of high power, confidence and the interaction term between high power and confidence were significant (Table 7). Thus, Hypothesis 2a was confirmed. The significant interaction term suggests that the relationship between confidence and distortion has a different slope for high-power individuals compared with participants in the other groups (Figure 3). In order to better understand this differences between group, I regressed distortion on confidence for each of the three groups.

Figure 3 - Distortion regressed on confidence, by power groups



It turned out that the influence of confidence on distortion held true only in the baseline power group, so confirming hypothesis 2b. Instead, for high-power participants, confidence in attribute j-1 does not significantly impact distortion on attribute j. Therefore, also hypothesis 2c is confirmed. Instead, quite

surprisingly, also for low-power participants, the influence of confidence on distortion is insignificant, disconfirming hypothesis 2c. Thus, although low-power individuals distort information at least as much as the baseline group, their tendency to distort is not driven by increasing confidence in the temporary leading alternative.

3.3.4 Discussion

Predecisional distortion of information proves itself once again to be a pervasive phenomenon in decision-making. The average amount of distortion, irrespective of the manipulation of power, was in line with previous studies (around 1 point on a 1-to-4 scale). The tendency to distort information in the pre-choice processing of information has been demonstrated to be also quite difficult to mitigate (Russo, 2014), so much so that it has been found even within experts (for decisions regarding their area of expertise) or public auditors (Russo, Meloy, & Wilks, 2000). With regard to this, the present study comes with a substantial finding about a psychological state able to eliminate distortion, i.e. sense of power. Indeed, heightened sense of power was able to dissipate distortion with participants involved in choice between two travel destinations. Instead, low-power participants showed a greater predecisional distortion compared with the baseline-power group, even if this difference was not statistically significant. Therefore, the effect of power on the magnitude of predecisional distortion of information was mainly driven by the high-power group. The experiment also provides some cues for a possible explanation of this effect. In fact, as in the previous relevant literature, confidence in the momentary leading alternative was found to influence distortion. However, the impact of confidence on distortion was also decomposed for the different experimental groups. With this analysis I could verify that this impact held only for participants in the baseline power group. This makes sense, since any extreme level of power could not be assumed for these subjects (power was not manipulated in this group). Consequently, any behavior that implies an exogenous influence of power on the relationship between confidence and distortion could not have been

explained. Obviously, for the groups primed with power (high or low) this assumption was not maintained. Indeed, in the high-power group, confidence had no influence on distortion. Thus, the indifference to one's confidence in the relative attractiveness of the alternatives could explain why high power individuals had low level of distortion. However, it came with greater surprise that confidence was not influential also for low-power participants. Given the fact that powerless individuals seem to be subject to predecisional distortion at least as much as subjects with neutral sense of power, it looks odd that the main driver of distortion is inactive for them. One possible explanation for this phenomenon is that low-power individuals have an impaired trust in their judgements, but at the same time this uncertainty does not allow them to eliminate the influence of an alternative's temporary attractiveness on distortion.

3.3.5 Managerial implications

Given a set of arguments that the firm can use to support the superiority of its brand in the eyes of the public, in which order is it most effective to present them? The question may seem trivial, but actually the pervasiveness of predecisional distortion of information shows how almost never consumers' evaluation is neutral to considering certain data before others (Carlson, Meloy, & Russo, 2006). Indeed, even the most expert and informed decision-makers end up succumbing under the necessity to make new information coherent with those already acquired, and so they distort their evaluations, even with no prior preference for one of the options. High-power individuals in this respect would represent a rare breed, since, in evaluating information concerning two travel destinations, their predecisional distortion drops to very small amounts.

For this reason, this category of consumers is essential for marketers and market analysts, interested in individuating the real (unbiased) preferences of their target market, e.g. by employing conjoint experiments and measurements (Russo et al., 1998). Market analysts could instantiate a temporary high-

power states in a panel of consumers either through the canonical priming tasks (e.g. imagined hierarchical role) or through messages in advertisements.

In addition, addressing empowered customers is especially attractive to companies operating in market niches and that are dominant only on few peripheral attributes of the product category (e.g. a smartphone equipped with a high-quality projector). The product offering of this kind of firms may succumb in by-attribute comparisons that would not present the favorable attributes just within the very first ones. In these cases indeed, a preference established after evaluating the first attributes has a cascading effect on information presented subsequently and can easily instill a leader-driven primacy (Carlson et al., 2006). Therefore, the companies that shine on few specific attributes need to address as a first step unbiased and empowered consumers.

3.4 Sense of power and willingness to self-assemble a purchased product

Many researchers have emphasized the positive association between power and action orientation. For example, powerful consumers have been shown to switch brand more easily than powerless consumers, even when they are roughly satisfied by their current brand. In this experiment, I test differences between consumers with different levels of power in their propensity toward choosing products that need to be assembled by the buyer in person. Self-assembling can be seen as a form of self-production, that in turn represents the extreme frontier in customerization. Coherently with their action orientation, high-power consumers are found to prefer a nightstand to self-assemble over the same nightstand already assembled (and equally priced). However, low-power consumers appear to be more indifferent between the two options, and do not lean heavily toward the assembled one. This result may reflect the need of low-power consumers to replenish missing power, by engaging in self-production activities.

3.4.1 Background and hypotheses

Production consists of design (specification of input), realization (manufacturing, throughput), and use, according to the service systems perspective. During the design stage, characteristics of the product or service (e.g., physical layout, design, quality) are decided on. During the realization stage, the actual creation and execution of the product or service take place (Atakan, Bagozzi, & Yoon, 2014). The present study focuses on consumer participation in the realization stage of production, since it looks at consumers engaging in self-assembling pre-designed branded products. There are several factors that might promote such an activity, the most prominent of which are probably the consumer's involvement and interest for the product to assemble, and consumers' degree of abstract (concrete) thinking. Holding involvement levels in the product constant, also the tendency to action might influence the willingness to engage in self-production.

One's sense of power might affect the propensity to engage in a self-assembling activity through several paths. Firstly, having power could increase one's self-efficacy (Anderson & Galinsky, 2006), making the individual feel more confident in her abilities. A state of powerlessness, to the opposite, might impair self-efficacy and prompt expectations of failure deriving from self-assembling products.

In addition, power has been shown to enhance abstraction and so to discourage more concrete thinking (Magee et al., 2010). For this reason, powerful individuals could be less willing to get involved in self-assembling products, since such an activity is more related to a concrete type of thinking.

Power has also been shown to enhance one's tendency to action, specifically by triggering the Behavioral Activation System (BAS) (Anderson et al., 2012). To the extent that self-assembling a product starting from its components is associated with more action than buying the same product already assembled, powerful individuals might be more prone to self-assemble the product.

Given the previous arguments, enhanced sense of power should prompt a greater willingness to buy a product to self-assemble.

All these tendencies should produce specular results for low-power individuals. Indeed, states of powerlessness should decrease one's self-efficacy and prevent the individual from self-assembling products that can be bought already assembled. To the opposite, the concrete thinking typical of low-power states might encourage the engagement in assembling activities. Finally, perceived powerlessness is associated with the Behavioral Inhibition System (BIS), that makes people more sensible to threats and pressures in the environment, discouraging any activities that might result in bad outcomes. For the latter argument, powerless individuals might want to avoid the risk to self-assemble a product wrongly, and so to face the confirmation of their lack of manual abilities.

Thus, perceived powerlessness should depress one's willingness to buy a product that needs to be assembled by the consumer herself. To the opposite, powerless individuals should prefer to buy a product that is already assembled.

In order to verify whether possible differences between powerful and powerless individuals are driven by high-power states, or low-power states, or both, there is the need to compare these states with neutral states of power. To this end, an experimental condition in which power was not manipulated and could be considered as having neutral power was incorporated into the design of the experiment.

Therefore, I hypothesize the following statements:

Hypothesis 1. High power individuals are more willing to buy a product to self-assemble, compared to neutral-power individuals.

Hypothesis 2. Low power individuals are less willing to buy a product to self-assemble, compared to neutral-power individuals.

3.4.2 Method

Design and participants

In order to analyze how sense of power influences consumers' willingness to engage in a self-assembling activity, I designed a between-subjects study involving one 3-level factor (*low power vs. high power vs. baseline condition*). 218 individuals participated into the experiment; they were recruited through Amazon Mechanical Turk and were paid 1 dollar each for completing a 10-minute survey. Through the demographics measured at the end of the experiment, I could check the demographic profile of the participants. Five subjects dropped out of the study before completing the demographics. The remaining sample was made of 79 females and 134 males (with 5 missing responses). The median age was 33 years, while, as for education status, 74% of the participants reported having at least a Bachelor's Degree.

Procedure

Sense of power

Sense of power was manipulated through a hierarchical role task (Rucker et al., 2011). Participants in the high-power condition were asked to simulate being the boss of a hypothetical company and to vividly imagine what it would have been like to be in this role (i.e., how they would have felt, thought, and acted). They were told that as a boss they had the possibility to evaluate the employees, but that the employees were not allowed to evaluate them. In the low-power condition, the situation was reversed, and participants had to imagine to be an employee that was evaluated by her boss but that could not evaluate the boss. Subjects in the neutral condition undertook a filler task (i.e. describing their last grocery shopping).

Dependent measures

The dependent variable is a binary choice between buying a given nightstand and buying the same nightstand unassembled (at the same price). The proportion of preferences for the second option across the three orthogonal conditions is interpreted as the willingness to self-assemble the nightstand.

The DV is presented as a scenario in which participants consider that they are in need to replace a broken nightstand. The consideration set is reduced to one nightstand sold at a given price. Participants are told that they have two options: one is buying the nightstand and having it assembled at their place by professionals; the other option is buying the nightstand at the same price and assemble it themselves. Having two alternatives equally priced and only differing in the fact that one of them has to be assembled allowed to detect effective differences in propensity toward embarking in the assemblage. Indeed, if we conceptualize the self-assemblage as an additional cost, any difference between the experimental conditions in choosing the more demanding option can be totally attributed to differential preferences toward the assemblage and not to the differential weighting of the price attribute.

Control measures

Most of the variability on the outcome measure was expected to be due to exogenous variables. One of the most prominent should have been the degree of involvement in the product category that the product to choose belonged to. Indeed, we cannot a priori establish any individual difference in involvement between participants assigned to the experimental conditions. These differences could affect significantly the preference for one of the two options constituting the outcome binary choice.

For this reason, the survey includes one involvement scale (Higie & Feick, 1989), intended to measure the degree to which participants consider furnishings as important and fascinating to them. The scale is made of 9 semantic differential items (e.g. important/unimportant, fascinating/mundane, exciting/unexciting, etc.) that participants employ to fill the statement "To me furnishings are..."

Participants also filled in a seven-item manipulation check on the amount of power they experienced while imagining being either a boss or an employee. The items were measured through a seven-point semantic differential scale.

3.4.3 Results

Manipulation check

The seven items of the manipulation check were used to extract one component through principal component analysis. The only component extracted could explain 82.8% of the variance across the seven items. The factor loadings of the items on the component are quite homogenously high ($>.85$; *Table 8*).

Table 8 – Component matrix with the items of the manipulation check of power

<i>Imagining myself as a [boss/employee] made me feel...</i>	Component 1
Negative/Positive	.900
Not powerful/Powerful	.920
Uncertain/Certain	.909
Weak/Strong	.931
Like I had no control/Like I had control	.912
Doubtful/Confident	.939
Sad/Happy	.858

Extraction method: Principal component analysis

Thus, the original seven items were collapsed in one index, made of the factor scores of each observation on the component. Participants in the different experimental conditions were compared on this index. On average, the subjects in the high-power group (that imagined being a boss) felt significantly more powerful

(M=.58, SD=.66) than the subjects in the low-power group (that imagined being an employee; M=-.70, SD=.89), $t=9.417$, $p<.0001$.

Willingness to buy a product to self-assemble

The χ^2 test conducted on the contingency table (*Table 9*) that crossed the power factor and the binary choice between products turned out to be not significant ($\chi^2=2.9659$, $df=2$, $p>.1$).

Table 9 - Contingency table between power and product choice

	<i>I buy the nightstand and have it assembled by professionals at my place</i>	<i>I buy the nightstand and assemble it by myself</i>	Total
<i>High power</i>	44.4%	55.6%	100.0%
<i>Low power</i>	48.3%	51.7%	100.0%
<i>Baseline</i>	58.0%	42.0%	100.0%
Total	50.9%	49.1%	100.0%

Comparing the distribution of the binary choice by group, it turns out that, while overall there is a substantial equilibrium in choosing between buying the assembled nightstand (50.46%) and buying it unassembled (49.54%), within the groups the situation is different. While the neutral group tends to choose the assembled nightstand (57.47%) more than the unassembled one (42.53%), the experimental groups display an opposite pattern: the 47.46% of the low-power participants and only the 44.44% of the high-power participants choose the assembled nightstand.

Thus, it seems that both low-power and high-power subjects, when faced with two equally priced alternatives only differing for the additional assemblage required, are more keen to pick the one requiring additional assemblage, compared with subjects in the neutral-power group.

It could be that these differences turned out to be not significant because they did not take into account individual differences in involvement in furnishings. In order to better detect these differences, I employed a logit model with the binary choice as the dependent variable, and power and involvement as independent variables.

The involvement scores was obtained through a principal component analysis conducted on the items of the involvement scale. *Table 10* shows the factor loadings of the first component extracted. The factor scores of the observation of this component were used to compute the involvement index used in the subsequent analysis.

Table 10 - Component Matrix with the items of the involvement scale

<i>To me home furnishings are...</i>	Component 1
Important/Unimportant (<i>reversed</i>)	.748
Boring/Interesting	.725
Not needed/Needed	.549
Exciting/Unexciting (<i>reversed</i>)	.828
Means nothing/Means a lot	.790
Involving/Uninvolving (<i>reversed</i>)	.802
Fascinating/Mundane (<i>reversed</i>)	.829
Worthless/Valuable	.662

Extraction method: Principal component analysis

A logit model regressed the binary choice *assembled product vs self-assembled product* on the factor representing the power groups and on the involvement score. The power factor had been disaggregated in two dummy variables, with the control group as the reference group (value of 0).

Table 11 – Logistic regression model

Dependent Variable: binary choice assembled nightstand (0) vs self-assembled nightstand (1)

	Estimate	Stand. Error	t-value	Sig.
(intercept)	1.405	0.060	23.269	0.000 ***
involvement	0.058	0.038	1.519	0.131
low-power	0.129	0.094	1.365	0.174
high-power	0.182	0.090	2.013	0.046 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

The results of the logit model (Table 11) show that, once that the involvement for the product category is taken into account, the high-power has a greater significant probability to choose the nightstand to self-assemble ($B=.182$, $t=2.013$, $p<.05$) than the neutral-power group. The low-power group instead does not have a greater significant probability to choose the nightstand to self-assemble. In addition, the involvement score, entered in the model as a control variable, does not have a significant effect.

3.4.4 Discussion

When people are confronted with two equally priced and identical product, one of which differ from the other only for involving the additional cost of assemblage, sense of power determines a tendency toward choosing the more demanding alternative. This difference is driven by high level but not by low level of power. In fact, when no power manipulation occurs (control group), the data depict a preference for the nightstand already assembled. Instead, high power subjects significantly tend to choose the nightstand to self-assemble, so confirming hypothesis 1. In turn, low power individuals shows a substantial indifference between the two alternatives. This result diverges from what hypothesized (hypothesis 2), that is that powerlessness would entail a preference for the nightstand already assembled. To the opposite, powerless

individuals show a greater tendency to select the nightstand to self-assemble compared with the neutral-power group.

We can speculate that an enhanced sense of power triggered a tendency to action, that in turn affected the propensity toward undertaking the additional implicit cost of self-assembling the nightstand. However, the relationship between sense of power and the latter preference is not straightforwardly linear, since states of low power did not prompt an opposite tendency compared to neutral states of power. Thus, the competing forces activated by powerlessness and mediating its impact on choice seem to level out, since none of these forces seems able to take over the others. What are these forces? As stated previously, powerlessness is associated with an inhibition of action and a drop in self-efficacy – which could discourage self-assemblage – but also with a more pronounced concrete type of thinking – which should act in the opposite direction. In addition, since lack of control and power is an unpleasant experience, a drop in power may trigger the need for power, and the desire to regain acceptable levels of influence. In an effort to reach this goal, the powerless might engage in activities that can restore a sense of control over the environment. In this light, self-assembling a nightstand may serve this objective.

3.4.5 Managerial implications

It seems that products to self-assemble are especially appealing to powerful consumers. In addition, this type of products does need to be more cheap compared to whether the products were sold as already assembled. In order to reach the high-power individuals, it is useful to turn to online communities. In these digital environments, there are opinion leaders that sort and filter relevant information to other members of their networks and influence attitudes and opinion within the groups. Allegedly, opinion leaders should perceive to have much power, at least with regard to their community, since they are able to mobilize considerable resources in terms of knowledge, experience and social approval. Firms can address opinion

leaders as powerful subjects within communities, and suggest them products to self-assemble. For instance, companies may offer to the most active users of their online community a free kit, to allow them to create the product themselves. Alternatively, companies might call prize contests, inviting members of their online communities to realize a version similar or deliberately caricatured of the product, and to post pictures of their craftworks on Instagram accompanied by specific hashtags. The firms may reward the best version with a free product or with limited-edition versions of their own products. Given their greater sense of power, opinion leaders are more likely to choose products to self-assemble and become ambassadors to others.

Moreover, the community fulfills another important role: it allows a direct exchange of information between opinion leaders and followers. Indeed, as we saw, powerless subjects are nonetheless attracted to a certain degree by products to self-assemble, probably because of their need to redeem their lacking sense of power and get in line with powerful subjects, by emulating their behaviors. “Get one’s hands dirty” and self-assembling objects to consume may represent a way for powerless consumers to restore a certain level of control and consistency over the environment. In this perspective, the community is an important showcase through which followers can “learn” from leaders to prefer self-assembling to an all prepared product.

In addition, the difficulty of assembling should be calibrated on the power of the consumers addressed, and on the type of situation (public vs. private) in which self-assembling is expected to occur. The most complicated assembling should be reserved to high-power consumers, and/or mainly for private situations (protected from social reprimand and mocking in case of failure). To the contrary, it is not advisable to propose too complex assembling processes to low-power consumers, since these consumers are mainly attracted by the possibility to satiate their power motive with self-assembling, while avoiding potential failure (that would end up exacerbating even more the perception to lack control).

CHAPTER 4 Conclusions

4.1 General discussion of the experiments

Individuating the bases of power and of the empowerment process investing the consumers in the marketplace is not sufficient to account for the complexity of the phenomenon. This work has focused on sense of power as a psychological construct, arising from structural conditions in the marketplace but not isomorphic to them. Rather than that, sense of power refers to the perception of asymmetric control of valued resources, own or others'.

Sense of power is the subjective perception of the asymmetrical control of valued resources (Galinsky et al., 2015). It ends up in a composite structure of beliefs about the self, made up of control and autonomy beliefs. In other words, the powerful believes that her objectives can be achieved given that the right means are adopted, and at the same time the powerful believes that she can (if she would) put into place those means (actions) that are required to reach the desired objectives. So the powerful actor feels to be free of external conditioning in enacting actions in accordance to her goals.

It has been argued that sense of power acts also as a motivational force within individuals that direct their thinking and behavior in such a way to maintain an optimal level of power. Whether something like an innate need for power exists or not, it is undeniable that completely lacking power is an unpleasant experience which people seek to escape from, and that powerless people will try to regain some control and autonomy to an at least satisfactory level. Consumers are not exempt to such forces and equilibria, as it is shown by the spending propensities of powerless people, that are attracted by goods and services signaling power. As it has been reported in the relevant literature, conspicuous consumption, and the lure

of luxury for powerless individuals speak just to the need of these people to restore some sense of power by acquiring products associated with power and status (Rucker & Galinsky, 2008). This happens to be true even if people are simply induced to certain temporary power states by the particular scent of the store they are buying in (Madzharov et al., 2015).

Perceived power is a pervasive construct in social life that greatly affects also consumer choices. Sense of power has been shown to lead to a differential association with the behavioral activation/inhibition system: high-power tends to be associated to the behavioral activation system (BAS), while powerlessness is associated with the behavioral inhibition system (Anderson & Berdahl, 2002; Keltner et al., 2003). Therefore, powerful consumers respond better to rewards, while powerless consumers respond more to threats. As such, power is linked to a tendency to make actions, especially when these actions are meaningful in order to reach a desired goal (C. Choi & Mattila, 2016). Therefore, provided that an option is associated with greater action, it should be preferred by people that have an elevated sense of power. It is on account of this, that powerful consumers have been shown to engage more in brand switching, even when satisfied with the previous brand, than consumers lacking power do (Jiang et al., 2014). However, this effect holds only as long as brand switching is associated with more action than not switching. In fact, as soon as it is non-switching that is associated with action taking, then all of sudden powerful individuals seem to prefer not to switch brand compared with powerless people.

It is also important to note that powerful and powerless individuals are different in their orientation toward the self or the others (Rucker et al., 2012). Power-holders have an agentic orientation, that makes them focus more on self-expression and self-protection. Low power instead prompts a communal orientation, and so people lacking power are more focused in bonding and affiliating with others and in taking others into consideration in decision making. These orientations are visible once again in spending patterns. Through randomized experiments, it has been shown that even just a situational priming of power is sufficient to make high-power subjects allocate more money to themselves versus others, and to make low-power subjects spending, to the opposite, more money for others than the self (Rucker et al., 2011).

In addition, powerful individuals are able to be more selective and flexible in attention and reasoning (Deng et al., 2018; A. Guinote, 2017). As a result, they are better able to prioritize their goals and they are goal-driven in information processing and behavior. For example, high-power consumers tend to evaluate and choose products on the basis of their functional utility rather than status and symbolic value (Rucker & Galinsky, 2009).

Sense of power has also been linked to a tendency to process information in an abstract manner (Magee & Smith, 2013), focusing on the gist of the data, and emphasizing the central and important attributes of the objects, rather than the peripheral and incidental ones. Abstract thinking is believed to be the basis of many consequences of power, including stereotyping, resistance to social influence, and impaired empathic accuracy.

Both the tendency to abstraction and the action orientation provide accounts for the increased propensity to risk of the power-holder. In fact, what the scientific literature gives back to us is the profile of the powerful individual as a risk-taker and an overconfident and overly optimistic person (Fast, Sivanathan, et al., 2012). Powerful negotiators took more risk by divulging their interests in face-to-face negotiations (Anderson & Galinsky, 2006) and powerful gamblers are more likely to take a card in a game of blackjack (Galinsky et al., 2003). Powerful judges tend to bet more on the precision of their judgements (Fast, Sivanathan, et al., 2012) and powerful consumers – differently from powerless ones – are equally confident in estimating the price of promotions in the (easier) dollar-off format and in the (harder) percentage-off format (C. Choi & S. Mattila, 2014). It has to be emphasized that risk-taking by powerful consumers is not driven by greater self-efficacy, but rather by optimistic risk perception.

Following these lines of research, I conducted three experiments to investigate how sense of power affects consumers' judgements and decisions.

The first experiment shows that powerful individuals are more likely to comply with a previously opposed argument, after they are asked to advocate that same controversial position. Specifically, they seem to

agree more with the fact that greenhouse emissions are not a serious problem. Indeed, powerful individuals perceive more choice than the others in their advocacy of the counterattitudinal opinions. They feel like, even if it is clear that they were required to write the essay by the experimenter, still the advocacy was made out of their free decision. Therefore, a greater cognitive dissonance arises from their advocacy, and this dissonance is reduced through powerful individuals getting more in agreement with the opinion that they previously opposed.

What interestingly emerges from this experiment is the fact that when cognitive dissonance was elicited with an independent task, this additional dissonance did not translate in a greater change of the controversial opinion. This suggests that, once that cognitive dissonance kicks in, any additional dissonant stimuli do not increase cognitive dissonance further.

The findings of this experiment suggest marketers (especially those operating in controversial industries and dealing with sustainability issues) to try to engage professional and high-profile journalists (sort of power-holders) to make them advocate the firm's view. Moreover, it is advisable to implement rewarded referral programs addressed at high-power consumers, since this strategy could trigger post-referral dissonance and subsequent compliance and satisfaction with the firm's products.

The second experiment investigates how sense of power affects value judgements and how it modifies the general tendency to distort information about two alternatives to choose.

Powerful consumers, in choosing between two travel destinations, show significant less predecisional distortion of information, that is they engage less to an early developed preference and in this way they are better able to pick up the best option available. Indeed, in spite of the overconfidence generally displayed, powerful individuals, once that a goal is clearly established, have a greater ability to commit to that goal and to display a relevant behavior. In accordance to this result, high power individuals seem also to disregard their confidence in the attractiveness of an alternative on an attribute, when they need to evaluate the evidence provided by the subsequent attribute.

Predecisional distortion of information is held to be driven by the need for cognitive consistency, in that the next attribute's evaluation is distorted to better agree with the current leading option. Thus, it seems that power decreases the activation of the need for consistency, so dampening the press of incoming data to be made consistent with the current preference, and reducing distortion to an almost negligible level.

This represents a novel result within literature, as, while previous studies have emphasized the biases that powerful people could fall into because of their overconfidence, no other study has highlighted that sense of power might magnify the ability to deal with cognitive dissonance.

In addition, we can speculate that such a high threshold to cognitive dissonance might be in turn induced by the tendency to abstract processing. Provided that powerful people tend to construe the world at a superordinate level, they may be more prone to wait for resolving cognitive dissonance between two elements at a more general level.

Since powerful/empowered consumers seem to achieve relatively unbiased value judgements, they may represent a precious resource for market analysts and practitioners struggling to understand their target's true preference (e.g. by employing conjoint measurements). Furthermore, firms operating in market niches and with few favorable attributes may benefit from targeting empowered consumers, as a first step to get unbiased acknowledgment of their strengths within the marketplace.

Finally, the third experiment shows that powerful consumers are more likely to choose a nightstand that needs to be self-assembled over the same nightstand already assembled, at the same price. Since they are willing to embark to the additional cost of self-assembly, they seem to feel a greater enjoyment in self-production activities than other consumers do. This propensity is explained by the greater action orientation of powerful consumers. Since it seems normal to assume that self-assembling a nightstand is associated with greater action than having it assembled by professionals with no additional cost, high-power consumers are more likely to engage in such an activity. Therefore, this experiment is consistent

with the previous literature on the topic, especially with studies emphasizing how power fosters approach motivation.

Marketers could gain insights from these findings. They could stimulate self-production practices by engaging the most active users of their online community through self-production contests or by rewarding word-of-mouth with toolkits to create one's own product from the scratch. Moreover, less powerful consumers can be induced to imitate other community members, and involve in self-production practices to fulfill their need to regain power.

4.2 Limitations and future directions

Although much effort has been put in designing and analyzing the experiments presented, some warnings have to be made. Firstly and more importantly, the priming techniques employed are not immune from involuntary activation of additional and confounding constructs beyond the experience of power. Specifically, eliciting low power in participants might inadvertently prompt reactance and revenge in participants, and so it might elicit the need for power. This would introduce a confounding variable within the experimental design along with spurious effects that are difficult to identify. Moreover, the temporary differences in power states manipulated through conceptual and mindset priming techniques might be so small to require very large sample size to be detected. Therefore, the usual sample sizes adopted in comparable studies might not be sufficient to obtain statistically significant results. In fact, at least when implemented in online experiments, people may put such a low effort in completing these tasks (e.g. they type too few characters or complete the task in too few seconds) that the statistical power of the study may result drastically dampened.

Future research on the topic could benefit from employing different priming techniques to elicit sense of power, to also bring convergent validity to the findings. In addition, more investigation is required as for

the variables that can explain (by mediation and moderation) the effects of power found within these experiments (e.g. the mediation of action orientation in the relationship between power and propensity to self-production). In addition, future researches might assess the conditions in which high power prompts unbiased vs biased decision making. In Experiment 2, powerful consumers are shown to be less affected by predecisional distortion of information. However, previous studies found that people may be overconfident and have an illusion of control. More investigation is needed to individuate the factors that dampen or emphasize certain type of biases in powerful and powerless problem solvers. Finally, future experiments may be specifically designed to disentangle the specific effects of sense of power, from those triggered by the need for power.

REFERENCES

- Abramson, L. Y., & Alloy, L. B. (1980). *Judgement of contingency: Errors and their implications*. Lawrence Erlbaum Ass New York.
- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*(1), 49.
- Alcaro, A., Huber, R., & Panksepp, J. (2007). Behavioral functions of the mesolimbic dopaminergic system: An affective neuroethological perspective. *Brain Research Reviews, 56*(2), 283–321. <http://doi.org/10.1016/J.BRAINRESREV.2007.07.014>
- Alloy, L. B., & Abramson, L. Y. (1979). Judgment of contingency in depressed and nondepressed students: Sadder but wiser? *Journal of Experimental Psychology: General, 108*(4), 441.
- Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology, 83*(6), 1362–1377. <http://doi.org/10.1037/0022-3514.83.6.1362>
- Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. *European Journal of Social Psychology, 36*(4), 511–536. <http://doi.org/10.1002/ejsp.324>
- Anderson, C., John, O. P., & Keltner, D. (2012). The Personal Sense of Power. *Journal of Personality, 80*(2), 313–344. <http://doi.org/10.1111/j.1467-6494.2011.00734.x>
- Anderson, C., John, O. P., Keltner, D., & Kring, A. M. (2001). Who attains social status? Effects of personality and physical attractiveness in social groups. *Journal of Personality and Social Psychology, 81*(1), 116.
- Anderson, C., & Kilduff, G. J. (2009). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology,*

96(2), 491.

Aries, E. J., Gold, C., & Weigel, R. H. (1983). Dispositional and situational influences on dominance behavior in small groups. *Journal of Personality and Social Psychology*, 44(4), 779.

Atakan, S. S., Bagozzi, R. P., & Yoon, C. (2014). Consumer participation in the design and realization stages of production: How self-production shapes consumer evaluations and relationships to products. *International Journal of Research in Marketing*, 31(4), 395–408.
<http://doi.org/10.1016/j.ijresmar.2014.05.003>

Bakan, D. (1966). *The duality of human existence: An essay on psychology and religion*.

Bandura, A. (1986). *Social foundations of thought and action. Englewood Cliffs, NJ, 1986*.

Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. *Handbook of Social Cognition*, 1, 1–40.

Bargh, J. A. (2014). The Historical Origins of Priming as the Preparation of Behavioral Responses: Unconscious Carryover and Contextual Influences of Real-World Importance. *Social Cognition*, 32(Supplement), 209–224. <http://doi.org/10.1521/soco.2014.32.supp.209>

Bargh, J. A., & Chartrand, T. L. (2000). The mind in the middle. *Handbook of Research Methods in Social and Personality Psychology*, 253–285.

Bargh, J. A., Raymond, P., Pryor, J. B., & Strack, F. (1995). Attractiveness of the underling: An automatic power → sex association and its consequences for sexual harassment and aggression. *Journal of Personality and Social Psychology*, 68(5), 768–781. <http://doi.org/10.1037/0022-3514.68.5.768>

Benoît, J.-P., Dubra, J., & Moore, D. A. (2015). Does the better-than-average effect show that people are overconfident?: Two experiments. *Journal of the European Economic Association*, 13(2), 293–329.

Berdahl, J. L., & Martorana, P. (2006). Effects of power on emotion and expression during a controversial group discussion. *European Journal of Social Psychology*, 36(4), 497–509.

<http://doi.org/10.1002/ejsp.354>

- Berman, B. (2016). Referral marketing: Harnessing the power of your customers. *Business Horizons*, 59(1), 19–28.
- Berridge, K. C. (2007). The debate over dopamine's role in reward: the case for incentive salience. *Psychopharmacology*, 191(3), 391–431.
- Blader, S. L., Shirako, A., & Chen, Y.-R. (2016). Looking Out From the Top. *Personality and Social Psychology Bulletin*, 42(6), 723–737. <http://doi.org/10.1177/0146167216636628>
- Boksem, M. A. S., Smolders, R., & Cremer, D. De. (2012). Social power and approach-related neural activity. *Social Cognitive and Affective Neuroscience*, 7(5), 516–520. <http://doi.org/10.1093/scan/nsp006>
- Brehm, J. W. (1966). A theory of psychological reactance.
- Broniarczyk, S. M., & Griffin, J. G. (2014). Decision Difficulty in the Age of Consumer Empowerment. *Journal of Consumer Psychology*, 24(4), 608–625. <http://doi.org/10.1016/j.jcps.2014.05.003>
- Burgmer, P., & Englich, B. (2013). Bullseye! How power improves motor performance. *Social Psychological and Personality Science*, 4(2), 224–232.
- Buss, D. M., & Craik, K. H. (1980). The frequency concept of disposition: dominance and prototypically dominant acts¹. *Journal of Personality*, 48(3), 379–392. <http://doi.org/10.1111/j.1467-6494.1980.tb00840.x>
- Buttle, F. A. (1998). Word of mouth: understanding and managing referral marketing. *Journal of Strategic Marketing*, 6(3), 241–254.
- Caliendo, M., Cobb-Clark, D. A., & Uhlendorff, A. (2015). Locus of control and job search strategies. *Review of Economics and Statistics*, 97(1), 88–103.
- Carlson, K. A., Meloy, M. G., & Russo, J. E. (2006). Leader-Driven Primacy: Using Attribute Order to Affect

Consumer Choice. *Journal of Consumer Research*, 32(4), 513–518. <http://doi.org/10.1086/500481>

Carney, D. R., Cuddy, A. J. C., & Yap, A. J. (2010). Power Posing. *Psychological Science*, 21(10), 1363–1368. <http://doi.org/10.1177/0956797610383437>

Carney, D. R., Yap, A. J., Lucas, B., Mehta, P., Ferrero, J. N., McGee, J. A., & Wilmuth, C. A. (2013). Does power corrupt? Or does power buffer stress—for better or worse. *Administrative Science Quarterly, Special Issue on Power*.

Carver, C. S. (2004). Negative affects deriving from the behavioral approach system. *Emotion*, 4(1), 3.

Chaxel, A.-S., Russo, J. E., & Wiggins, C. (2016). A Goal-Priming Approach to Cognitive Consistency: Applications to Judgment. *Journal of Behavioral Decision Making*, 29(1), 37–51. <http://doi.org/10.1002/bdm.1874>

Chaxel, A. S., & Russo, J. E. (2015). Cognitive consistency: Cognitive and motivational perspectives. *Neuroeconomics, Judgment, and Decision Making*, 29–48.

Chen, F. F., Jing, Y., & Lee, J. M. (2014). The looks of a leader: Competent and trustworthy, but not dominant. *Journal of Experimental Social Psychology*, 51, 27–33. <http://doi.org/10.1016/J.JESP.2013.10.008>

Chen, S., Langner, C. A., & Mendoza-Denton, R. (2009). When dispositional and role power fit: Implications for self-expression and self–other congruence. *Journal of Personality and Social Psychology*, 96(3), 710.

Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology*, 80(2), 173.

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology*, 104(1), 103.

- Choi, C., & Mattila, A. S. (2016). The Effects of Other Customers' Dress Style on Customers' Approach Behaviors. *Cornell Hospitality Quarterly*, *57*(2), 211–218. <http://doi.org/10.1177/1938965515619228>
- Choi, C., & S. Mattila, A. (2014). The effects of promotion framing on consumers' price perceptions. *Journal of Service Management*, *25*(1), 149–160. <http://doi.org/10.1108/JOSM-11-2012-0234>
- Choi, S., Mattila, A. S., Van Hoof, H. B., & Quadri-Felitti, D. (2017). The role of power and incentives in inducing fake reviews in the tourism industry. *Journal of Travel Research*, *56*(8), 975–987.
- Cichocka, A., de Zavala, A. G., Marchlewska, M., Bilewicz, M., Jaworska, M., & Olechowski, M. (2018). Personal control decreases narcissistic but increases non-narcissistic in-group positivity. *Journal of Personality*, *86*(3), 465–480. <http://doi.org/10.1111/jopy.12328>
- Connell, J. P. (1985). A New Multidimensional Measure of Children's Perceptions of Control. *Child Development*, *56*(4), 1018. <http://doi.org/10.2307/1130113>
- Corr, P. J. (2002). J. A. Gray's reinforcement sensitivity theory: tests of the joint subsystems hypothesis of anxiety and impulsivity. *Personality and Individual Differences*, *33*(4), 511–532. [http://doi.org/10.1016/S0191-8869\(01\)00170-2](http://doi.org/10.1016/S0191-8869(01)00170-2)
- Corr, P. J., & Cooper, A. J. (2016). The Reinforcement Sensitivity Theory of Personality Questionnaire (RST-PQ): Development and validation. *Psychological Assessment*, *28*(11), 1427.
- Cova, B., & Cova, V. (2012). On the road to prosumption: marketing discourse and the development of consumer competencies. *Consumption Markets & Culture*, *15*(2), 149–168. <http://doi.org/10.1080/10253866.2012.654956>
- Crocker, J. (1981). Judgment of covariation by social perceivers. *Psychological Bulletin*, *90*(2), 272.
- De Dreu, C. K. ., & Van Kleef, G. A. (2004). The influence of power on the information search, impression formation, and demands in negotiation. *Journal of Experimental Social Psychology*, *40*(3), 303–319. <http://doi.org/10.1016/J.JESP.2003.07.004>

- deCharms, R. (1981). Personal causation and locus of control: Two different traditions and two uncorrelated measures. In H. M. Lefcourt (Ed.), *Research with the Locus of Control Construct*. Academic Press.
- DeCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.
- DeCharms, R., Carpenter, V., & Kuperman, A. (1965). The "origin-pawn" variable in person perception. *Sociometry*, 241–258.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668. <http://doi.org/10.1037/0033-2909.125.6.627>
- Deci, E. L., & Ryan, R. M. (1985a). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1985b). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109–134. [http://doi.org/10.1016/0092-6566\(85\)90023-6](http://doi.org/10.1016/0092-6566(85)90023-6)
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268. http://doi.org/10.1207/S15327965PLI1104_01
- Deng, M., Zheng, M., & Guinote, A. (2018). When does power trigger approach motivation? Threats and the role of perceived control in the power domain. *Social and Personality Psychology Compass*, 12(5), e12390. <http://doi.org/10.1111/spc3.12390>
- Dépret, E., & Fiske, S. T. (1993). Social Cognition and Power: Some Cognitive Consequences of Social Structure as a Source of Control Deprivation. In *Control Motivation and Social Cognition* (pp. 176–

202). New York, NY: Springer New York. http://doi.org/10.1007/978-1-4613-8309-3_7

Depue, R. A., & Collins, P. F. (1999). Neurobiology of the structure of personality: Dopamine, facilitation of incentive motivation, and extraversion. *Behavioral and Brain Sciences*, 22(3), 491–517.

DeWall, C. N., Baumeister, R. F., Mead, N. L., & Vohs, K. D. (2011). How leaders self-regulate their task performance: evidence that power promotes diligence, depletion, and disdain. *Journal of Personality and Social Psychology*, 100(1), 47.

Dillard, J. F., Rigsby, J. T., & Goodman, C. (2004). The making and remaking of organization context. *Accounting, Auditing & Accountability Journal*, 17(4), 506–542. <http://doi.org/10.1108/09513570410554542>

Doyen, S., Klein, O., Pichon, C.-L., & Cleeremans, A. (2012). Behavioral Priming: It's All in the Mind, but Whose Mind? *PLoS ONE*, 7(1), e29081. <http://doi.org/10.1371/journal.pone.0029081>

Duan, J., Wu, S. J., & Sun, L. (2017). Do the powerful discount the future less? The effects of power on temporal discounting. *Frontiers in Psychology*, 8, 1007.

Dubois, D., Denton, E., & Rucker, D. D. (2011). Dynamic effects of power on possessions, preferences, and desires. *Unpublished Manuscript*.

Dubois, D., Rucker, D. D., & Galinsky, A. D. (2010). The accentuation bias: Money literally looms larger (and sometimes smaller) to the powerless. *Social Psychological and Personality Science*, 1(3), 199–205.

Dubois, D., Rucker, D. D., & Galinsky, A. D. (2012). Super Size Me: Product Size as a Signal of Status. *Journal of Consumer Research*, 38(6), 1047–1062. <http://doi.org/10.1086/661890>

Dubois, D., Rucker, D. D., & Galinsky, A. D. (2015). Social class, power, and selfishness: When and why upper and lower class individuals behave unethically. *Journal of Personality and Social Psychology*, 108(3), 436.

Duguid, M. M., & Goncalo, J. A. (2012). Living large: The powerful overestimate their own height.

Psychological Science, 23(1), 36–40.

- Dujarier, M.-A. (2016). The three sociological types of consumer work. *Journal of Consumer Culture*, 16(2), 555–571. <http://doi.org/10.1177/1469540514528198>
- Edwards, K., & Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology*, 71(1), 5.
- Fast, N. J., & Chen, S. (2009). When the boss feels inadequate: Power, incompetence, and aggression. *Psychological Science*, 20(11), 1406–1413.
- Fast, N. J., Gruenfeld, D. H., Sivanathan, N., & Galinsky, A. D. (2009). Illusory control: A generative force behind power's far-reaching effects. *Psychological Science*, 20(4), 502–508.
- Fast, N. J., Halevy, N., & Galinsky, A. D. (2012). The destructive nature of power without status. *Journal of Experimental Social Psychology*, 48(1), 391–394. <http://doi.org/10.1016/J.JESP.2011.07.013>
- Fast, N. J., Sivanathan, N., Mayer, N. D., & Galinsky, A. D. (2012). Power and overconfident decision-making. *Organizational Behavior and Human Decision Processes*, 117(2), 249–260. <http://doi.org/10.1016/J.OBHDP.2011.11.009>
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology*, 58(2), 203.
- Fiedler, K. (2007). Construal Level Theory as an Integrative Framework for Behavioral Decision-Making Research and Consumer Psychology. *Journal of Consumer Psychology*, 17(2), 101–106. [http://doi.org/10.1016/S1057-7408\(07\)70015-3](http://doi.org/10.1016/S1057-7408(07)70015-3)
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. In *Social Cognition* (pp. 109–123). Routledge.
- Fiske, S. T., & Berdahl, J. (2007). Social power. *Social Psychology: Handbook of Basic Principles*, 2, 678–692.

- Fiske, S. T., & Dépret, E. (1996). Control, Interdependence and Power: Understanding Social Cognition in Its Social Context. *European Review of Social Psychology*, 7(1), 31–61. <http://doi.org/10.1080/14792779443000094>
- Forster, K. I., & Davis, C. (1984). Repetition priming and frequency attenuation in lexical access. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 10(4), 680.
- Fowles, D. C. (1987). Application of a behavioral theory of motivation to the concepts of anxiety and impulsivity. *Journal of Research in Personality*, 21(4), 417–435. [http://doi.org/10.1016/0092-6566\(87\)90030-4](http://doi.org/10.1016/0092-6566(87)90030-4)
- Fragale, A. R., Overbeck, J. R., & Neale, M. A. (2011). Resources versus respect: Social judgments based on targets' power and status positions. *Journal of Experimental Social Psychology*, 47(4), 767–775.
- French, J. R., Raven, B., & Cartwright, D. (1959). The bases of social power. *Classics of Organization Theory*, 7, 311–320.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From Power to Action. *Journal of Personality and Social Psychology*, 85(3), 453–466. <http://doi.org/10.1037/0022-3514.85.3.453>
- Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95(6), 1450–1466. <http://doi.org/10.1037/a0012633>
- Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and Perspectives Not Taken. *Psychological Science*, 17(12), 1068–1074. <http://doi.org/10.1111/j.1467-9280.2006.01824.x>
- Galinsky, A. D., Rucker, D. D., & Magee, J. C. (2015). Power: Past findings, present considerations, and future directions. *APA Handbook of Personality and Social Psychology, Volume 3: Interpersonal Relations*. Washington: American Psychological Association. <http://doi.org/10.1037/14344-016>
- Garbinsky, E. N., Klesse, A.-K., & Aaker, J. (2014). Money in the Bank: Feeling Powerful Increases Saving.

Journal of Consumer Research, 41(3), 610–623. <http://doi.org/10.1086/676965>

Gollwitzer, P. M., & Moskowitz, G. B. (1996). Goal effects on action and cognition.

Goodwin, S. A., Gubin, A., Fiske, S. T., & Yzerbyt, V. Y. (2000). Power Can Bias Impression Processes: Stereotyping Subordinates by Default and by Design. *Group Processes & Intergroup Relations*, 3(3), 227–256. <http://doi.org/10.1177/1368430200003003001>

Gray, J. A. (1994). Personality dimensions and emotion systems. *The Nature of Emotion: Fundamental Questions*, 329–331.

Gray, J. A., & Mcnaughton, N. (2000). The psychology of Anxiety and Enquiry in to the functions of the septo hippocampus system. New York: Oxford University Press.

Grayson, K., & Martinec, R. (2004). Consumer Perceptions of Iconicity and Indexicality and Their Influence on Assessments of Authentic Market Offerings. *Journal of Consumer Research*, 31(2), 296–312. <http://doi.org/10.1086/422109>

Grönroos, C. (1994). From Marketing Mix to Relationship Marketing. *Management Decision*, 32(2), 4–20. <http://doi.org/10.1108/00251749410054774>

Guinote, A. (2007a). Behaviour variability and the situated focus theory of power. *European Review of Social Psychology*, 18(1), 256–295.

Guinote, A. (2007b). Power affects basic cognition: Increased attentional inhibition and flexibility. *Journal of Experimental Social Psychology*, 43(5), 685–697. <http://doi.org/10.1016/J.JESP.2006.06.008>

Guinote, A. (2008). Power and affordances: When the situation has more power over powerful than powerless individuals. *Journal of Personality and Social Psychology*, 95(2), 237.

Guinote, A. (2010). The situated focus theory of power.

Guinote, A. (2017). How Power Affects People: Activating, Wanting, and Goal Seeking. *Annual Review of*

Psychology, 68(1), 353–381. <http://doi.org/10.1146/annurev-psych-010416-044153>

Guinote, A. E., & Vescio, T. K. (2010). *The social psychology of power*. Guilford Press.

Harrison, T., & Waite, K. (2015). Impact of co-production on consumer perception of empowerment. *The Service Industries Journal*, 35(10), 502–520. <http://doi.org/10.1080/02642069.2015.1043276>

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

Heller, S., & Ullrich, J. (2017). Does power increase self-control? Episodic priming may not provide the answer. *Collabra: Psychology*, 3(1).

Henson, R. N., Eckstein, D., Waszak, F., Frings, C., & Horner, A. J. (2014). Stimulus–response bindings in priming. *Trends in Cognitive Sciences*, 18(7), 376–384.

Higie, R. A., & Feick, L. F. (1989). Enduring Involvement: Conceptual and Measurement Issues. *ACR North American Advances*, NA-16. Retrieved from <http://www.acrwebsite.org/search/view-conference-proceedings.aspx?id=6979>

Hirsh, J. B., Galinsky, A. D., & Zhong, C.-B. (2011). Drunk, Powerful, and in the Dark. *Perspectives on Psychological Science*, 6(5), 415–427. <http://doi.org/10.1177/1745691611416992>

Hogan, R., Curphy, G. J., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. *American Psychologist*, 49(6), 493.

Hu, J., & Judge, T. A. (2017). Leader–team complementarity: Exploring the interactive effects of leader personality traits and team power distance values on team processes and performance. *Journal of Applied Psychology*, 102(6), 935.

Huang, L., Galinsky, A. D., Gruenfeld, D. H., & Guillory, L. E. (2011). Powerful Postures Versus Powerful Roles. *Psychological Science*, 22(1), 95–102. <http://doi.org/10.1177/0956797610391912>

Huff, M. J., McNabb, J., & Hutchison, K. A. (2015). List blocking and longer retention intervals reveal an

- influence of gist processing for lexically ambiguous critical lures. *Memory & Cognition*, 43(8), 1193–1207.
- Inesi, M. E. (2010). Power and loss aversion. *Organizational Behavior and Human Decision Processes*, 112(1), 58–69. <http://doi.org/10.1016/J.OBHPD.2010.01.001>
- Inesi, M. E., Botti, S., Dubois, D., Rucker, D. D., & Galinsky, A. D. (2011). Power and Choice. *Psychological Science*, 22(8), 1042–1048. <http://doi.org/10.1177/0956797611413936>
- Inesi, M. E., Gruenfeld, D. H., & Galinsky, A. D. (2012). How power corrupts relationships: Cynical attributions for others' generous acts. *Journal of Experimental Social Psychology*, 48(4), 795–803. <http://doi.org/10.1016/J.JESP.2012.01.008>
- Jiang, Y., Zhan, L., & Rucker, D. D. (2014). Power and Action Orientation: Power as a Catalyst for Consumer Switching Behavior. *Journal of Consumer Research*, 41(1), 183–196. <http://doi.org/10.1086/675723>
- Jin, L., He, Y., & Zhang, Y. (2013). How power states influence consumers' perceptions of price unfairness. *Journal of Consumer Research*, 40(5), 818–833. <http://doi.org/10.1086/673193>
- Jin, L., & Huang, Y. (2018). How Power States Influence the Persuasiveness of Top-Dog versus Underdog Appeals. *Journal of Consumer Psychology*.
- Johnson, S. L., Carver, C. S., Joormann, J., & Cuccaro, M. L. (2016). Genetic polymorphisms related to behavioral approach and behavioral inhibition scales. *Personality and Individual Differences*, 88, 251–255.
- Jordan, J., Sivanathan, N., & Galinsky, A. D. (2011). Something to Lose and Nothing to Gain. *Administrative Science Quarterly*, 56(4), 530–558. <http://doi.org/10.1177/0001839212441928>
- Josephs, R. A., Sellers, J. G., Newman, M. L., & Mehta, P. H. (2006). The mismatch effect: When testosterone and status are at odds. *Journal of Personality and Social Psychology*, 90(6), 999–1013. <http://doi.org/10.1037/0022-3514.90.6.999>

- Joshi, P. D., & Fast, N. J. (2013). Power and reduced temporal discounting. *Psychological Science, 24*(4), 432–438.
- Kahneman, D., & Tversky, A. (2013). Prospect theory: An analysis of decision under risk. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 99–127). World Scientific.
- Kanten, A. B. (2011). The effect of construal level on predictions of task duration. *Journal of Experimental Social Psychology, 47*(6), 1037–1047. <http://doi.org/10.1016/J.JESP.2011.04.005>
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*(2), 265.
- Keltner, D., Young, R. C., Heerey, E. A., Oemig, C., & Monarch, N. D. (1998). Teasing in hierarchical and intimate relations. *Journal of Personality and Social Psychology, 75*(5), 1231–1247. <http://doi.org/10.1037/0022-3514.75.5.1231>
- Kiesel, A., Kunde, W., & Hoffmann, J. (2007). Mechanisms of subliminal response priming. *Advances in Cognitive Psychology, 3*(1–2), 307.
- Kim, S., & McGill, A. L. (2011). Gaming with Mr. Slot or gaming the slot machine? Power, anthropomorphism, and risk perception. *Journal of Consumer Research, 38*(1), 94–107.
- Kraus, M. W., Piff, P. K., & Keltner, D. (2011). Social Class as Culture. *Current Directions in Psychological Science, 20*(4), 246–250. <http://doi.org/10.1177/0963721411414654>
- Kuester, M., & Benkenstein, M. (2014). Turning dissatisfied into satisfied customers: How referral reward programs affect the referrer's attitude and loyalty toward the recommended service provider. *Journal of Retailing and Consumer Services, 21*(6), 897–904.
- Kuhl, J. (1984). Volitional Aspects of Achievement Motivation and Learned Helplessness: Toward a Comprehensive Theory of Action Control. *Progress in Experimental Personality Research, 13*, 99–171. <http://doi.org/10.1016/B978-0-12-541413-5.50007-3>

- Kuhn, D., & Lao, J. (1996). Effects of Evidence on Attitudes: Is Polarization the Norm? *Psychological Science*, 7(2), 115–120. <http://doi.org/10.1111/j.1467-9280.1996.tb00340.x>
- Kurt, D., Inman, J. J., Argo, J. J., Didem Kurt, J. Jeffrey Inman, & Argo, J. J. (2011). The Influence of Friends on Consumer Spending: The Role of Agency–Communion Orientation and Self-Monitoring. *Journal of Marketing Research*, 48(4), 741–754. <http://doi.org/10.1509/jmkr.48.4.741>
- Labrecque, L. I., von Eschen, J., Mathwick, C., & Novak, T. P. (2013). Consumer Power: Evolution in the Digital Age. *Journal of Interactive Marketing*, 27(4), 257–269. <http://doi.org/10.1016/j.intmar.2013.09.002>
- Lammers, J., & Burgmer, P. (2017). Power increases anchoring effects on judgment. *Social Cognition*, 35(1), 40–53.
- Lammers, J., Dubois, D., Rucker, D. D., & Galinsky, A. D. (2013). Power gets the job: Priming power improves interview outcomes. *Journal of Experimental Social Psychology*, 49(4), 776–779. <http://doi.org/10.1016/j.jesp.2013.02.008>
- Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2008). Illegitimacy Moderates the Effects of Power on Approach. *Psychological Science*, 19(6), 558–564. <http://doi.org/10.1111/j.1467-9280.2008.02123.x>
- Lammers, J., Stapel, D. A., & Galinsky, A. D. (2010). Power Increases Hypocrisy. *Psychological Science*, 21(5), 737–744. <http://doi.org/10.1177/0956797610368810>
- Lammers, J., Stoker, J. I., Rink, F., & Galinsky, A. D. (2016). To Have Control Over or to Be Free From Others? The Desire for Power Reflects a Need for Autonomy. *Personality and Social Psychology Bulletin*, 42(4), 498–512. <http://doi.org/10.1177/0146167216634064>
- Langner, C. A., & Keltner, D. (2008). Social power and emotional experience: Actor and partner effects within dyadic interactions. *Journal of Experimental Social Psychology*, 44(3), 848–856.

- Leach, S., Weick, M., & Lammers, J. (2017). Does influence beget autonomy? Clarifying the relationship between social and personal power. *Journal of Theoretical Social Psychology, 1*(1), 5–14. <http://doi.org/10.1002/jts5.5>
- Liberman, N., & Trope, Y. (2008). The psychology of transcending the here and now. *Science, 322*(5905), 1201–1205.
- Liberman, N., Trope, Y., & Stephan, E. (2007). Psychological distance. *Social Psychology: Handbook of Basic Principles, 2*, 353–383.
- Liu, S. Q., & Mattila, A. S. (2017). Airbnb: Online targeted advertising, sense of power, and consumer decisions. *International Journal of Hospitality Management, 60*, 33–41.
- Madzharov, A. V., Block, L. G., & Morrin, M. (2015). The Cool Scent of Power: Effects of Ambient Scent on Consumer Preferences and Choice Behavior. *Journal of Marketing, 79*(1), 83–96. <http://doi.org/10.1509/jm.13.0263>
- Magee, J. C., & Galinsky, A. D. (2008). 8 Social Hierarchy: The Self-Reinforcing Nature of Power and Status. *Academy of Management Annals, 2*(1), 351–398. <http://doi.org/10.5465/19416520802211628>
- Magee, J. C., Galinsky, A. D., & Gruenfeld, D. H. (2007). Power, Propensity to Negotiate, and Moving First in Competitive Interactions. *Personality and Social Psychology Bulletin, 33*(2), 200–212. <http://doi.org/10.1177/0146167206294413>
- Magee, J. C., Milliken, F. J., & Lurie, A. R. (2010). Power Differences in the Construal of a Crisis: The Immediate Aftermath of September 11, 2001. *Personality and Social Psychology Bulletin, 36*(3), 354–370. <http://doi.org/10.1177/0146167209360418>
- Magee, J. C., & Smith, P. K. (2013). The Social Distance Theory of Power. *Personality and Social Psychology Review, 17*(2), 158–186. <http://doi.org/10.1177/1088868312472732>
- Marquis, C., Toffel, M. W., & Zhou, Y. (2016). Scrutiny, Norms, and Selective Disclosure: A Global Study of

Greenwashing. *Organization Science*, 27(2), 483–504. <http://doi.org/10.1287/orsc.2015.1039>

Marsh, J. E., Beaman, C. P., Hughes, R. W., & Jones, D. M. (2012). Inhibitory control in memory: Evidence for negative priming in free recall. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 38(5), 1377.

Mattila, A. S., Wu, L., & Choi, C. (2016). Powerful or powerless customers: the influence of gratitude on engagement with CSR. *Journal of Services Marketing*, 30(5), 519–528.

Mayr, S., & Buchner, A. (2007). Negative Priming as a Memory Phenomenon. *Zeitschrift Für Psychologie / Journal of Psychology*, 215(1), 35–51. <http://doi.org/10.1027/0044-3409.215.1.35>

McClelland, D. C. (1961). *The achievement society*. Princeton, NJ: Von Nostrand.

McGregor, I., Nash, K., Mann, N., & Phillips, C. E. (2010). Anxious uncertainty and reactive approach motivation (RAM). *Journal of Personality and Social Psychology*, 99(1), 133.

McShane, L., & Sabadoz, C. (2015). Rethinking the concept of consumer empowerment: recognizing consumers as citizens. *International Journal of Consumer Studies*, 39(5), 544–551. <http://doi.org/10.1111/ijcs.12186>

Mehta, P. H., & Josephs, R. A. (2010). Testosterone and cortisol jointly regulate dominance: Evidence for a dual-hormone hypothesis. *Hormones and Behavior*, 58(5), 898–906. <http://doi.org/10.1016/J.YHBEH.2010.08.020>

Meloy, M. G., & Russo, J. E. (2004). Binary choice under instructions to select versus reject. *Organizational Behavior and Human Decision Processes*, 93(2), 114–128. <http://doi.org/10.1016/J.OBHDP.2003.12.002>

Miller, G. R. (2017). Persuasion and public relations: Two “Ps” in a pod. In *Public relations theory* (pp. 45–66). Routledge.

Molden, D. C. (2014). Understanding Priming Effects in Social Psychology: What is “Social Priming” and How

- does it Occur? *Social Cognition*, 32(Supplement), 1–11. <http://doi.org/10.1521/soco.2014.32.suppl.1>
- Moore, J. W., Lagnado, D., Deal, D. C., & Haggard, P. (2009). Feelings of control: Contingency determines experience of action. *Cognition*, 110(2), 279–283. <http://doi.org/10.1016/J.COGNITION.2008.11.006>
- Morrison, E. W., See, K. E., & Pan, C. (2015). An Approach-Inhibition Model of Employee Silence: The Joint Effects of Personal Sense of Power and Target Openness. *Personnel Psychology*, 68(3), 547–580. <http://doi.org/10.1111/peps.12087>
- Mourali, M., & Nagpal, A. (2013). The powerful select, the powerless reject: Power's influence in decision strategies. *Journal of Business Research*, 66(7), 874–880.
- Mourali, M., Yang, Z., Pons, F., & Hassay, D. (2018). Consumer power and choice deferral: The role of anticipated regret. *International Journal of Research in Marketing*, 35(1), 81–99.
- Murphy, S. T., & Zajonc, R. B. (1993). Affect, cognition, and awareness: affective priming with optimal and suboptimal stimulus exposures. *Journal of Personality and Social Psychology*, 64(5), 723.
- Ng, S. H. (1980). *The social psychology of power* (Vol. 21). Academic press.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *School Field*, 7(2), 133–144.
- Ochsner, K. N., Chiu, C.-Y. P., & Schacter, D. L. (1994). Varieties of priming. *Current Opinion in Neurobiology*, 4(2), 189–194. [http://doi.org/10.1016/0959-4388\(94\)90071-X](http://doi.org/10.1016/0959-4388(94)90071-X)
- Overbeck, J. R., Neale, M. A., & Govan, C. L. (2010). I feel, therefore you act: Intrapersonal and interpersonal effects of emotion on negotiation as a function of social power. *Organizational Behavior and Human Decision Processes*, 112(2), 126–139. <http://doi.org/10.1016/J.OBHDP.2010.02.004>
- Overbeck, J. R., & Park, B. (2001). When power does not corrupt: Superior individuation processes among powerful perceivers. *Journal of Personality and Social Psychology*, 81(4), 549–565. <http://doi.org/10.1037/0022-3514.81.4.549>

- Overbeck, J. R., & Park, B. (2006). Powerful perceivers, powerless objects: Flexibility of powerholders' social attention. *Organizational Behavior and Human Decision Processes*, 99(2), 227–243. <http://doi.org/10.1016/J.OBHDP.2005.10.003>
- Pansardi, P. (2012). *Power to and power over* : two distinct concepts of power? *Journal of Political Power*, 5(1), 73–89. <http://doi.org/10.1080/2158379X.2012.658278>
- Patrick, B. C., Skinner, E. A., & Connell, J. P. (1993). What motivates children's behavior and emotion? Joint effects of perceived control and autonomy in the academic domain. *Journal of Personality and Social Psychology*, 65(4), 781.
- Pires, G. D., Stanton, J., & Rita, P. (2006). The internet, consumer empowerment and marketing strategies. *European Journal of Marketing*, 40(9/10), 936–949. <http://doi.org/10.1108/03090560610680943>
- Reid, D. W. (1984). Participatory control and the chronic-illness adjustment process. In *Research with the locus of control construct: Extensions and limitations* (pp. 361–389). Elsevier.
- Ritzer, G., & Jurgenson, N. (2010). Production, Consumption, Prosumption: The nature of capitalism in the age of the digital "prosumer." *Journal of Consumer Culture*, 10(1), 13–36. <http://doi.org/10.1177/1469540509354673>
- Roediger, H. L., & McDermott, K. B. (1995). Creating false memories: Remembering words not presented in lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21(4), 803.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1.
- Rubini, M., & Kruglanski, A. W. (1997). Brief encounters ending in estrangement: Motivated language use and interpersonal rapport in the question–answer paradigm. *Journal of Personality and Social Psychology*, 72(5), 1047.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2011). Generous Paupers and Stingy Princes: Power Drives

Consumer Spending on Self versus Others. *Journal of Consumer Research*, 37(6), 1015–1029.
<http://doi.org/10.1086/657162>

Rucker, D. D., & Galinsky, A. D. (2008). Desire to Acquire: Powerlessness and Compensatory Consumption. *Journal of Consumer Research*, 35(2), 257–267. <http://doi.org/10.1086/588569>

Rucker, D. D., & Galinsky, A. D. (2009). Conspicuous consumption versus utilitarian ideals: How different levels of power shape consumer behavior. *Journal of Experimental Social Psychology*, 45(3), 549–555.

Rucker, D. D., & Galinsky, A. D. (2016). The Agentic-Communal Model of Power: implications for consumer behavior. *Current Opinion in Psychology*, 10, 1–5. <http://doi.org/10.1016/j.copsyc.2015.10.010>

Rucker, D. D., Galinsky, A. D., & Dubois, D. (2012). Power and consumer behavior: How power shapes who and what consumers value. *Journal of Consumer Psychology*, 22(3), 352–368.
<http://doi.org/10.1016/j.jcps.2011.06.001>

Rucker, D. D., Hu, M., & Galinsky, A. D. (2014). The experience versus the expectations of power: A recipe for altering the effects of power on behavior. *Journal of Consumer Research*, 41(2), 381–396.

Russo, J. E. (2014). The predecisional distortion of information. In *Neuroeconomics, judgment, and decision making* (pp. 109–128). Psychology Press.

Russo, J. E., Carlson, K. A., Meloy, M. G., & Yong, K. (2008). The goal of consistency as a cause of information distortion. *Journal of Experimental Psychology: General*, 137(3), 456.

Russo, J. E., & Corbin, J. C. (2016). Not by desire alone: The role of cognitive consistency in the desirability bias. *Judgment and Decision Making*, 11(5), 449.

Russo, J. E., Meloy, M. G., & Medvec, V. H. (1998). Predecisional Distortion of Product Information. *Journal of Marketing Research*, 35(4), 438. <http://doi.org/10.2307/3152163>

Russo, J. E., Meloy, M. G., & Wilks, T. J. (2000). Predecisional Distortion of Information by Auditors and Salespersons. *Management Science*, 46(1), 13–27. <http://doi.org/10.1287/mnsc.46.1.13.15127>

- Russo, J. E., & Schoemaker, P. J. H. (1992). Managing overconfidence. *Sloan Management Review*, 33(2), 7–17.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43(3), 450–461. <http://doi.org/10.1037/0022-3514.43.3.450>
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy, and the self in psychological development. In *Nebraska symposium on motivation: Developmental perspectives on motivation*. University of Nebraska Press.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <http://doi.org/10.1006/CEPS.1999.1020>
- Ryan, R. M., & Deci, E. L. (2006). Self-Regulation and the Problem of Human Autonomy: Does Psychology Need Choice, Self-Determination, and Will? *Journal of Personality*, 74(6), 1557–1586. <http://doi.org/10.1111/j.1467-6494.2006.00420.x>
- Salamone, J. D., & Correa, M. (2012). The mysterious motivational functions of mesolimbic dopamine. *Neuron*, 76(3), 470–485.
- Samland, J., Josephs, M., Waldmann, M. R., & Rakoczy, H. (2016). The role of prescriptive norms and knowledge in children's and adults' causal selection. *Journal of Experimental Psychology: General*, 145(2), 125.
- Schmid, P. C., & Schmid Mast, M. (2013). Power increases performance in a social evaluation situation as a result of decreased stress responses. *European Journal of Social Psychology*, 43(3), 201–211.
- Schmidt, F., Haberkamp, A., & Schmidt, T. (2011). Dos and don'ts in response priming research. *Advances in Cognitive Psychology*, 7, 120.
- Schubert, T. W., & Koole, S. L. (2009). The embodied self: Making a fist enhances men's power-related self-

conceptions. *Journal of Experimental Social Psychology*, 45(4), 828–834.
<http://doi.org/10.1016/J.JESP.2009.02.003>

Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: another look at the availability heuristic. *Journal of Personality and Social Psychology*, 61(2), 195.

Sivanathan, N., Pillutla, M. M., & Keith Murnighan, J. (2008). Power gained, power lost. *Organizational Behavior and Human Decision Processes*, 105(2), 135–146.
<http://doi.org/10.1016/J.OBHP.2007.10.003>

Skinner, E. A. (1985). Action, control judgments, and the structure of control experience. *Psychological Review*, 92(1), 39.

Skinner, E. A., Chapman, M., & Baltes, P. B. (1988). Control, means-ends, and agency beliefs: A new conceptualization and its measurement during childhood. *Journal of Personality and Social Psychology*, 54(1), 117.

Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology*, 82(1), 22.

Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895.

Smith, J. A., & Foti, R. J. (1998). A pattern approach to the study of leader emergence. *The Leadership Quarterly*, 9(2), 147–160. [http://doi.org/10.1016/S1048-9843\(98\)90002-9](http://doi.org/10.1016/S1048-9843(98)90002-9)

Smith, P. K., & Bargh, J. A. (2008). Nonconscious Effects of Power on Basic Approach and Avoidance Tendencies. *Social Cognition*, 26(1), 1–24. <http://doi.org/10.1521/soco.2008.26.1.1>

Smith, P. K., & Galinsky, A. D. (2010). The Nonconscious Nature of Power: Cues and Consequences. *Social*

and *Personality Psychology Compass*, 4(10), 918–938. <http://doi.org/10.1111/j.1751-9004.2010.00300.x>

Smith, P. K., & Hofmann, W. (2016). Power in everyday life. *Proceedings of the National Academy of Sciences of the United States of America*, 113(36), 10043–8. <http://doi.org/10.1073/pnas.1604820113>

Smith, P. K., Jostmann, N. B., Galinsky, A. D., & van Dijk, W. W. (2008). Lacking Power Impairs Executive Functions. *Psychological Science*, 19(5), 441–447. <http://doi.org/10.1111/j.1467-9280.2008.02107.x>

Smith, P. K., & Magee, J. C. (2015). The interpersonal nature of power and status. *Current Opinion in Behavioral Sciences*, 3, 152–156. <http://doi.org/10.1016/J.COBEHA.2015.04.007>

Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees: power priming and abstract information processing. *Journal of Personality and Social Psychology*, 90(4), 578.

Stadler, M. A., & Hogan, M. E. (1996). Varieties of positive and negative priming. *Psychonomic Bulletin & Review*, 3(1), 87–90. <http://doi.org/10.3758/BF03210745>

Stel, M., Dijk, E. van, Smith, P. K., Dijk, W. W. van, & Djalal, F. M. (2012). Lowering the Pitch of Your Voice Makes You Feel More Powerful and Think More Abstractly. *Social Psychological and Personality Science*, 3(4), 497–502. <http://doi.org/10.1177/1948550611427610>

Stephan, E., Liberman, N., & Trope, Y. (2011). The effects of time perspective and level of construal on social distance. *Journal of Experimental Social Psychology*, 47(2), 397–402. <http://doi.org/10.1016/J.JESP.2010.11.001>

Suleiman, R. (1996). Expectations and fairness in a modified Ultimatum game. *JOURNAL OF ELSEVIER Journal of Economic Psychology Journal of Economic Psychology*, 17(17), 531–554. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.2663&rep=rep1&type=pdf>

Thibaut, J. W., & Kelley, H. H. (1959). Power and dependence. *The Social Psychology of Groups*, 7, 100–125.

Toffler, A. (1980). The rise of the prosumer. *The Third Wave. New York: Morrow*, 265–288.

- Tost, L. P., Gino, F., & Larrick, R. P. (2012). Power, competitiveness, and advice taking: Why the powerful don't listen. *Organizational Behavior and Human Decision Processes*, *117*(1), 53–65. <http://doi.org/10.1016/J.OBHDP.2011.10.001>
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, *117*(2), 440.
- Trope, Y., & Liberman, N. (2011). Construal level theory. *Handbook of Theories of Social Psychology*, *1*, 118–134.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*(4157), 1124–1131.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(4481), 453–458.
- van Dijke, M., & Poppe, M. (2006). Striving for personal power as a basis for social power dynamics. *European Journal of Social Psychology*, *36*(4), 537–556. <http://doi.org/10.1002/ejsp.351>
- Van Kleef, G. A., Homan, A. C., Finkenauer, C., Gündemir, S., & Stamkou, E. (2011). Breaking the Rules to Rise to Power. *Social Psychological and Personality Science*, *2*(5), 500–507. <http://doi.org/10.1177/1948550611398416>
- van Kleef, G. A., Oveis, C., van der Löwe, I., LuoKogan, A., Goetz, J., & Keltner, D. (2008). Power, Distress, and Compassion. *Psychological Science*, *19*(12), 1315–1322. <http://doi.org/10.1111/j.1467-9280.2008.02241.x>
- van Noort, G., & Willemsen, L. M. (2012). Online Damage Control: The Effects of Proactive Versus Reactive Webcare Interventions in Consumer-generated and Brand-generated Platforms. *Journal of Interactive Marketing*, *26*(3), 131–140. <http://doi.org/10.1016/j.intmar.2011.07.001>
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*,

68(1), 1–17. <http://doi.org/10.1509/jmkg.68.1.1.24036>

Wathieu, L., Brenner, L., Carmon, Z., Chattopadhyay, A., Wertenbroch, K., Drolet, A., ... Wu, G. (2002).

Consumer Control and Empowerment: A Primer. *Marketing Letters*, 13(3), 297–305.

<http://doi.org/10.1023/A:1020311914022>

Weber, M. (1946). Bureaucracy. In *HH Gerth & CW Mills: Max Weber: Essays in sociology*.

Weick, M., & Guinote, A. (2008). When subjective experiences matter: Power increases reliance on the ease of retrieval. *Journal of Personality and Social Psychology*, 94(6), 956.

Weick, M., & Guinote, A. (2010). How long will it take? Power biases time predictions. *Journal of Experimental Social Psychology*, 46(4), 595–604. <http://doi.org/10.1016/J.JESP.2010.03.005>

Weisz, J. R. (1986). Contingency and control beliefs as predictors of psychotherapy outcomes among children and adolescents. *Journal of Consulting and Clinical Psychology*, 54(6), 789.

Weisz, J. R., & Stipek, D. J. (1982). Competence, Contingency, and the Development of Perceived Control. *Human Development*, 25(4), 250–281. <http://doi.org/10.1159/000272812>

Whitson, J. A., Liljenquist, K. A., Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., & Cadena, B. (2013). The blind leading: Power reduces awareness of constraints. *Journal of Experimental Social Psychology*, 49(3), 579–582. <http://doi.org/10.1016/J.JESP.2012.10.009>

Wiggins, R. R., & Ruefli, T. W. (2005). Schumpeter's ghost: Is hypercompetition making the best of times shorter? *Strategic Management Journal*, 26(10), 887–911. <http://doi.org/10.1002/smj.492>

Wilkinson, D., Guinote, A., Weick, M., Molinari, R., & Graham, K. (2010). Feeling socially powerless makes you more prone to bumping into things on the right and induces leftward line bisection error. *Psychonomic Bulletin & Review*, 17(6), 910–914. <http://doi.org/10.3758/PBR.17.6.910>

Willis, G. B., & Guinote, A. (2011). The Effects of Social Power on Goal Content and Goal Striving: A Situated Perspective. *Social and Personality Psychology Compass*, 5(10), 706–719.

<http://doi.org/10.1111/j.1751-9004.2011.00382.x>

Wind, J., & Rangaswamy, A. (2001). Customerization: The next revolution in mass customization. *Journal of Interactive Marketing, 15*(1), 13–32.

Winter, D. G. (1973). The power motive.

Wirth, M. M., Welsh, K. M., & Schultheiss, O. C. (2006). Salivary cortisol changes in humans after winning or losing a dominance contest depend on implicit power motivation. *Hormones and Behavior, 49*(3), 346–352. <http://doi.org/10.1016/J.YHBEH.2005.08.013>

Wojciszke, B., & Struzynska-Kujalowicz, A. (2007). Power Influences Self-Esteem. *Social Cognition, 25*(4), 472–494. <http://doi.org/10.1521/soco.2007.25.4.472>

Wright, L. T., Shaw, D., Newholm, T., & Dickinson, R. (2006). Consumption as voting: an exploration of consumer empowerment. *European Journal of Marketing, 40*(9/10), 1049–1067. <http://doi.org/10.1108/03090560610681005>

Yap, A. J., Wazlawek, A. S., Lucas, B. J., Cuddy, A. J. C., & Carney, D. R. (2013). The Ergonomics of Dishonesty. *Psychological Science, 24*(11), 2281–2289. <http://doi.org/10.1177/0956797613492425>

Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *Undefined*. Retrieved from <https://www.semanticscholar.org/paper/Trait-based-perspectives-of-leadership.-Zaccaro/2e2f67f02401fcfa638c767cce0c4cba1d48f8b4>