Chapter 1
General Introduction
In the last three decades psychology has seen a remarkable blossoming of research on self-regulation. This is not surprising: Self-regulation is one of the most important aspects of selfhood and is one of the crucial keys to understanding human behavior and cognition. To regulate the self means to change the self so as to bring it into line with some preferred standards. These standards can be chosen by the self or can be dictated by the environment. Either way, self-regulation represents a fundamental element for human adaptation. Due to self-regulation the self can become flexible, altering itself according to the requirements and opportunities of the environment. Given their theoretical importance and practical implications, in the past, self-regulatory processes have been extensively studied from an intrapersonal perspective. Only in the past few years social psychology has started to recognize and examine that self-regulatory processes and relationships dynamics are often intertwined. The social environment matters for self-regulation. And self-regulation matters for interpersonal interactions.

The present dissertation contributes to the recent line of research that examines the interplay between self-regulation and interpersonal processes. We will examine the influence of self-regulation for three interpersonal dynamics that play a key role in the development and maintenance of interpersonal relationships, such as interpersonal goal support, trust and daily sacrifices. And we will examine the influence of close relationships on aspects of self-regulation, such as motivation and goal achievement. We will start this first chapter defining self-regulation from an intrapersonal perspective. We will then link self-regulation to the interpersonal domain. We will first describe how self-regulation can affect interpersonal processes. We will review research that has linked the two aspects of self-regulation on which this dissertation is focused (regulatory focus and self-control strength) with the interpersonal sphere. We will then describe how interpersonal processes can affect self-regulation. We will review research on the influence of others for the individual’s goal accomplishment. In Chapters 2 to 5, we will present four empirical lines of research that contribute to our understanding of the interplay between self-regulation and interpersonal processes. Finally, in the last chapter, we will discuss the integration and implications of the findings reported in the previous chapters.

**Self-regulation: definition and components**

Self-regulation is the capacity of the self to alter itself as to bring it into alignment with some standards, internal or external. Many self-regulatory activities are automatic, and individuals are not consciously aware of the processes and the strategies they perform. This is observable in a broad range of phenomena: from the basic physical ones such as thermoregulation (the human body performs various actions to maintain a constant standard temperature) to more complex cognitive phenomena such
as subliminal goal priming (e.g. quickly flashing images of coke below the individuals’ threshold of conscious perception, automatically activates the goal of drinking coke). On the other hand, self-regulation is also involved in all those conscious decisions that individuals make every day in order to gain control and seek changes in their thoughts, emotions, and behaviors. This conscious form of self-regulation is often called self-control (e.g., Baumeister & Heatherton, 1996). Nevertheless, it is extremely difficult, and not scientifically appropriate, to draw a clear line between conscious and unconscious activities in self-regulation. Most of the forms of self-regulation involve a combination of both types of processes which co-occur in the implementation of self-regulatory activities.

To understand how self-regulation operates we should look at the seminal work of Carver & Scheier (1981, 1998) on the test-operate-test-exit (TOTE) model. According to this model, self-regulation starts with a test phase that consists on comparing the current state of the self to the goal or standard. If the test produces an unsatisfactory result and yields a discrepancy between current state and standard, then the operate phase is activated to bring the self closer to the standard and reduce the discrepancy. From time to time, there is another test phase that assesses the progress toward the standard and, eventually, the test will reveal that the self has met the standard which will lead to the exit phase.

This model incorporates the four essential ingredients of self-regulation: standards and monitoring (involved in the test phase), and self-regulatory strength and motivation (involved in the operate phase) (Baumeister & Vohs, 2007). Let us consider each in turn.

**Standards.** The term “self-regulation” does not mean to just change the self in a random way but rather to bring it in line with some concepts of how the self might be. These concepts are standards, also known as goals. Standards can be sorted into two fundamental types (Carver & Scheier, 1998). The first types of standards are desired end states that the individual wants to meet and approach. These standards have been called positive standards. The second types of standards are undesired end states that the individual wants to move away from and avoid. These standards have been called negative standards. The difference between positive and negative standards has also been the focus of one of the most influential theories that defines the different types of standards that direct people’s behaviors: Regulatory Focus Theory (Higgins, 1997). According to this theory, we can approach or avoid standards in either a promotion or prevention-oriented way. When people are in a promotion focus, they want to approach standards that are experienced as gains (i.e., positive standards) and avoid standards that are experienced as non-gains (i.e., negative standards). Promotion-oriented individuals are predominantly tuned to ideal self goals (or standards) that emphasize advancement in dreams, hopes, and aspirations. When people are in a prevention focus, they want to approach standards that are experienced as non-losses (i.e., positive standards) and
avoid standards that are experienced as losses (i.e., negative standards). Prevention-oriented individuals are predominantly tuned to ought self goals (or standards) that emphasize safety in duties, obligations, and responsibilities.

**Monitoring.** Monitoring refers to keeping track of the discrepancy between current state and standards. Monitoring signals that steps are being made towards (or away from) the standards and whether progress has being made. It corresponds to the test phase of the TOTE model. Due to monitoring the individual knows the size of the discrepancy between actual state and standards and can take actions to reduce the discrepancy. Generally, good monitoring improves self-regulation (Baumeister, Heatherton, & Tice 1994).

**Self-regulatory strength.** The third ingredient is the ability to change the self, also known as willpower. Operation to change the self requires some power which is not unlimited. In fact, regulating the self depends on a limited resource that operates like a strength or energy and that weakens with each following self-control exertion (e.g. Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven, Tice & Baumeister, 1998). The state of reduction of self-control resources has been called ego depletion (Baumeister & Heatherton, 1996) and can lead to self-control failure. Typically in the experimental paradigm to test the effects of self-control depletion, half of the participants are asked to engage in an initial task that requires self-control while the other half performs a comparable but neutral task. Afterward, all participants perform a second, unrelated task that requires self-control (e.g., attempting to solve unsolvable anagrams). Compared to participants who performed the neutral task, participants who had earlier been engaged in self-control are depleted of self-regulatory resources. They generally perform poorer on the second task and are more likely to encounter self-control failure (e.g., Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven et al., 1998).

**Motivation.** The final ingredient of self-regulation is the motivation to achieve the standards or goal. The more the standard is perceived of value, the more the individual will be motivated to work toward achieving it. Several processes affect motivation. For example, motivation is higher when people get closer to the goal (Lewin, 1935; Miller, 1944, 1959). Also, motivation is high when people believe they possess the necessary skills to achieve a goal (Bandura, 1986).

When standards are clear and well-defined, monitoring is frequent, and self-control and motivation are high, the individual is in a good position to achieve the desired end-state or goal (Baumeister & Vohs, 2007).

**Self-regulation in the interpersonal context**

People do not live in a social vacuum, but they spend most of their time with others with whom they are interdependent. As a result, the way people regulate the self
has many implications for interpersonal life and interpersonal life has many implications for the way people regulate the self. Research has only recently started to examine how different forms of self-regulation interact with the social environment. Next, we will review research that has investigated how two of the most studied aspects of self-regulation (regulatory focus and self-control strength) have an impact on interpersonal processes. Then, we will review research that has focused on the influence of social relationships for the individual’s pursuit of standards or goals.

Self-regulation affects interpersonal processes

Regulatory Focus Theory

Regulatory Focus Theory (Higgins, 1997) describes a form of self-regulation that distinguishes between an orientation towards standards that are experienced as gain vs. non-gain (promotion focus) and an orientation towards standards that are experienced as non-loss vs. loss (prevention focus). Regulatory foci have been related to different kinds of strategic inclinations and processing styles (e.g., Crowe & Higgins, 1997; Förster, Higgins, & Idson, 1998). While carrying on a task, a promotion-oriented individual will be eager to attain the desired gain, will take risks and will explore all the possibilities that the environment can offer to help him achieve his goal. In contrast, a prevention-orientated individual will be very attentive not to make mistakes, will try to be as accurate as possible and will narrow his attention to the task at hand to avoid interferences and distractions.

Research has largely studied the impact of promotion and prevention orientations on several intrapersonal outcomes (for a review see Molden, Lee, & Higgins, 2008), but only few studies have examined the interpersonal consequences of promotion and prevention focus. A first study by Molden, Lucas, Finkel, Kumashiro, and Rusbult (2009) examined the impact of promotion and prevention goal support on relationship and personal well-being. They found that among unmarried romantic couples, partner support of promotion-focused goals (i.e. ideal self goals – hopes, dreams and aspirations –), but not prevention-focused goals (i.e. ought self goals – duties, obligations and responsibilities –), predicted well-being. On the contrary, among married couples partner support for both promotion-focused and prevention-focused goals predicted well-being. The authors reasoned that unmarried couples are especially attainment-oriented and therefore benefit from promotion goal support. In contrast, married couples are both attainment- and maintenance-oriented and they benefit from both types of goal support.

A second line of research has examined the predictors of forgiveness for promotion- and prevention-oriented individuals (Molden & Finkel, 2010). The authors found that forgiveness is predicted by trust for promotion-oriented individuals, while it is predicted by commitment for prevention-oriented individuals. Promotion-oriented
individuals tend to rely on feelings of trust that may reflect a belief that something can be gained if the relationship is repaired. In contrast, prevention-oriented individuals tend to rely on feelings of commitment that may reflect a focus on the security from loss that the relationship might still provide.

Third, a recent examination of the role of regulatory focus on the evaluation of romantic alternatives (Finkel, Molden, Johnson, & Eastwick, 2010) revealed that promotion-oriented individuals attend to, positively evaluate, and actively pursue potential alternative partners to a greater degree than prevention-oriented individuals. Furthermore, the association of commitment with negative evaluations of romantic alternatives is weaker for promotion-oriented individuals than for prevention-oriented individuals.

A recent development of regulatory focus theory describes the concept of regulatory fit (Higgins, 2000). When people pursue goals in a manner that fits their regulatory orientation, they “feel right” about what they are doing, with several motivational benefits for goal pursuit. For example, if a prevention-oriented individual is pursuing a goal in a very meticulous and careful way, she will experience regulatory fit, will feel right about what she is doing and will be extremely motivated towards the goal (Förster et al., 1998). A couple of recent lines of research investigated how the intrapersonal phenomenon of regulatory fit may have interpersonal consequences on trust and forgiveness. The experience of intrapersonal regulatory fit is translated into feelings of rightness that increase interpersonal trust (Vaughn, Harkness, & Clark, 2010) and forgiveness (Santelli, Struthers, & Eaton, 2009).

The above discussed empirical evidence shows that regulatory focus can exert a profound impact on interpersonal relationships. Nevertheless, research has only recently started to explore the interpersonal implications derived by the way people approach goals (in a promotion or a prevention manner). In the first two empirical chapters of this dissertation, we will show how regulatory focus theory can be fruitfully applied to the study of an interpersonal phenomenon like goal support.

Self-control Strength

Self-control is defined as the ability to alter the self which relies on a limited resource (Baumeister & Heatherton, 1996). Research that links self-control to the interpersonal domain has gained a great amount of attention in the past few years and this field is growing rapidly. Most of the studies in this field have shown that high self-control is good for interpersonal functioning. From a developmental perspective, research has shown that the level of self-control in children is positively correlated with their concurrent interpersonal success (Funder, Block, & Block, 1983) and predicts their interpersonal success in adolescence (Mischel, Shoda, & Peake, 1988). The level of self-control children had in preschool also reduced the negative effects of rejection sensitivity in the later development (Ayduk et al., 2000), and young adults with high
self-control displayed greater trust and appropriateness of their emotional expressions than young adults with low self-control (Block & Kremen, 1996).

In adults too high self-control has been shown to bring benefits for many social interactions. Self-control is associated with secure attachment style, perspective-taking, and empathy (Tangney et al., 2004). Self-control promotes prosocial behavior and forgiveness among strangers (Balliet et al., 2010; De Wall, Baumeister, Gailliot, & Maner, 2008), while it reduces anger and aggression (Finkel, DeWall, Slotter, Oaten, & Foshee, 2009; Tangney et al., 2004). Self-control enables people to make a good impression on others increasing the likelihood of social acceptance (Vohs, Baumeister, & Ciarocco, 2005). In mixed-race interactions, self-control facilitates the inhibition of the display of racist behavior (Richeson & Shelton, 2003).

In close relationships, research has shown that self-control favors the suppression of feelings of attraction to alternative partners (Prónk, Karremans, & Wigboldus, 2011; Ritter, Karremans, & van Schie, 2010; Vohs & Baumeister, 2011), pro-relationship behaviors, such as accommodation (Finkel & Campbell, 2001) and forgiveness (Prónk, Karremans, Overbeek, Vermulst, & Wigboldus, 2010), and the ability of keeping promises made to romantic partners (Peetz & Kammrath, 2011). Self-control seems so functional to close relationships that relationship well-being is especially high when both partners have high levels of self-control (Vohs, Finkenauer, & Baumeister, 2011).

Thus, most of the self-control literature shows that high self-control leads to positive outcomes. Because most of the individuals’ preferred standards seem to align with social norms and long-term benefits (e.g. preservation of one’s close relationship), self-control is most often used for positive ends to the self and the society. However self-control is ultimately a tool that enables people to change the self according to the desired standards. Self-control may also lead to negative outcomes if the determined standards are dysfunctional for the individual, the relationship, or the society. For example, people can use self-control to engage in personally harmful and risky behavior as a route to social acceptance. Enacting certain behaviors that are unpleasant at first, such as the taste of a beer at first sip, requires self-control, because people have to overcome the impulse to stop drinking. Yet, because the behavior may ultimately enhance social acceptance, people will use self-control to continue enacting it (Raw & Vohs, 2011). Thus, self-control can be used to start engaging in behaviors that may be harmful to the self, behaviors which may eventually become habitual and automatic. Paradoxically, self-control will then be necessary to stop or reduce those behaviors (if the individual realizes that the costs of these behaviors outweigh their benefits).

Other recent research has shown that low executive functioning, a concept that is closely related to a lack of self-control (Barkley, 2001; Baumeister, Schmeichel, & Vohs, 2007; Hayes, Gifford, & Ruckstuhl, 1996), can improve communication in uncomfortable social settings (Apfelbaum, Krendl & Ambady, 2010; Apfelbaum &
Sommers, 2009). Apfelbaum and colleagues (2010) found that troubled obese teenagers perceived older adults low in executive functioning as more open, more empathic, and better able to give advice than adults high in executive functioning. In line with these findings, Apfelbaum and Sommers (2009) found that low executive functioning can improve interracial communication. In their study, white participants who were depleted of executive functioning enjoyed more and displayed less inhibited behavior when interacting with black participants than participants who were not depleted. And Black participants rated white participants who were depleted of executive functioning less prejudiced than white participants with their full executive functioning capacity. The empirical evidence that we have now presented shows that most of the times self-control is functional for interdependence life, although not always. The present dissertation contributes to the literature that investigates the positive vs. negative role played by self-control for interpersonal life. We will examine the impact of self-control on two important interpersonal phenomena such as trust and daily sacrifice.

Interpersonal processes affect self-regulation

Interpersonal goal support

The social environment influences which goals, or standards, people want to accomplish. Research has shown that simply observing another individual striving for a goal automatically activates the pursuit of that goal in the observer (Aarts, Gollwitzer, & Hassin, 2004). If, for example, we observe someone eating a delicious ice-cream, we might suddenly realize that it’s hot and we are hungry and that we should look for some ice-cream too. Furthermore, simply reminding people of significant others led people to automatically activate goals that were associated with these significant others (Fitzsimons & Bargh, 2003).

Social relationships also influence the likelihood that people will reach their goals or standards. Other people can be instrumental for the individual’s goal pursuit, facilitating self-regulatory activities that will lead to successful goal accomplishment. For example, individuals whose romantic partners strongly support their goal pursuit are more likely to achieve those goals over time (Brunstein, Dangelmayer, & Schultheiss, 1996). The most prominent line of research in this regard investigates the Michelangelo Phenomenon, a process whereby interaction partners shape one another’s goal pursuits in such a manner as to move each person closer to (vs. further from) each person’s ideal self (Drigotas, Rusbult, Wieselquist, & Whitton, 1999). The process by which partners help each other to move closer to their ideal self is called partner affirmation which refers to the extent to which a relationship partner consciously or unconsciously behaves in a ways that elicits ideal-congruent self-regulation from the target. As a result of partner affirmation, the target experiences movement toward the ideal self, in that he moves closer to his ideal self standards.
Given that the social environment has the potential to facilitate goal accomplishment, people may benefit from recognizing and categorizing who is instrumental and who is not (Fitzsimons & Shah, 2009). Furthermore, people tend to approach and positively evaluate others who are instrumental to their goal achievement, while they tend to avoid others who represent obstacles for their goal achievement (Fitzsimons & Fishbach, 2010; Fitzsimons & Shah, 2008). Finally, research has shown that to the extent that people see others in terms of their instrumentality, they are likelier to succeed and reach their goals (Fitzsimons & Shah, 2008). In the first two empirical chapters of the dissertation, we will show how regulatory focus theory influences interpersonal goal support and how, subsequently, interpersonal goal support affects the individual’s motivation and success in goal accomplishment.

The present dissertation

The review of the previous studies has shown that research is starting to explore the interplay between self-regulatory activities and interpersonal processes. The present dissertation contributes to this literature by investigating the impact of regulatory focus and self-control strength on various interpersonal dynamics. Specifically, Chapters 2 and 3 will describe the role of regulatory focus in interpersonal goal support which, in turn, affects self-regulatory components, such as goal achievement and motivation. Chapters 4 and 5 will describe the role of self-control strength (or perceived self-control strength) for trust and sacrifice.

In the present dissertation both regulatory focus and self-control strength will be examined as individual differences and as temporary states. Individual differences describe variations between individuals. Across time and situations some individuals will be more likely to display self-control, and promotion or prevention focus than others. Typically, individual differences are assessed with self-report measures. Temporary states describe variations within the individuals. Level of self-control and regulatory focus can vary in the same individual across different situations. Some situations might trigger a promotion focus, a prevention focus, or might hinder the level of self-control. Typically, temporary states are manipulated in the laboratory with the use of experimental paradigms that trigger a particular state in the participants.

I now present an overview of the empirical chapters. Each chapter represents an independent research article that has been published or is submitted for publication. The summaries of the studies should provide the readers with an overview of the topic of the research articles and should direct the readers’ attention to the chapters that may be of particular interest to them.
Summary of empirical chapters

Chapter 2: Regulatory Focus and the Michelangelo Phenomenon

Chapter 2 sought to illuminate how regulatory focus affects the Michelangelo phenomenon. As we previously described, the Michelangelo Phenomenon examines the role of relationship partners for the support of ideal self goals. Ideal self goals represent promotion focus types of goals. Therefore, we predicted that goal regulatory congruence, or the match between people’s regulatory focus (promotion focus) and the correspondent self-goals (ideal self goals) should facilitate partner goal support and target movement toward the goals. Using four complementary measurement techniques, and performing both within-participant and across-partner analyses, results showed that promotion orientation (both for the target and the partner) yields positive consequences for the Michelangelo Phenomenon. Several mechanisms responsible for this association were tested and discussed. Prevention focus was either irrelevant to or weakly negatively associated with partner goal support and target movement toward the ideal self.

Chapter 3: Interpersonal Regulatory Fit

Chapter 2 examined the influence of interpersonal goal support in a purely promotion-oriented context (ideal self goals) and mainly examined the benefits of a match between the individual’s regulatory focus and the type of goal at hand. Chapter 3 examined the benefits of interpersonal goal support that derive from another type of match: the fit between two individual’s regulatory orientations. Specifically, this chapter examined how the individual’s goal pursuit is affected by advice and support received from a close other whose orientation fits (versus does not fit) the individual's orientation. We sought to investigate whether this type of interpersonal regulatory fit causes consequences for goal pursuit that parallel those of intrapersonal regulatory fit. Furthermore, we investigated whether these effects occur in a symmetrical fashion for both promotion and prevention-oriented individuals. Six studies consistently revealed that only promotion-oriented individuals profited from interpersonal regulatory fit and experienced motivational benefits when receiving goal related suggestions from promotion-oriented others. Prevention-oriented individuals did not profit from interpersonal regulatory fit. Mechanisms for these asymmetrical effects were also assessed.

Chapter 4: Perceived Self-control and Trust

Chapter 4 focused on the role that self-control plays for a fundamental interpersonal phenomenon as trust. Specifically, in this chapter we studied the perception of another person’s level of self-control as a primary factor that people may use to gauge others’ trustworthiness. We proposed and tested the hypothesis that in
interactions between strangers and relationship partners, people detect the level of another person’s self-control which, in turn, affects trust in that person. Results of four studies revealed that people can assess both another individual’s dispositional self-control (Studies 4.1 and 4.2) and another individual’s temporary depletion of self-control (Studies 4.3 and 4.4), and that individuals that are perceived to be high in self-control are trusted more than individuals who are perceived to be low in this characteristics.

**Chapter 5: Self-control and Daily Sacrifices**

Chapter 5 focused on the role of self-control in people’s decision to sacrifice for others. People in close relationships often encounter situations in which their interests are at odds: what is good for one partner is not good for the other, and individuals are forced to choose between pursuing their own interest and sacrificing for their partners’ needs. Most of the daily sacrifices that people confront in close relationships are small, in that the partners’ interests differ in minor ways. In this chapter we tested the role of self-control strength in the decision of sacrificing (or not) for a close other. Results of four studies revealed that the impulsive (low self-controlled) response to situations of small divergence of interests is to forego personal interest and instead opt to sacrifice for the close other and the relationship.

**Final Note**

The remainder of the dissertation consists of four empirical chapters and a final chapter that considers key findings, implications and directions for future research. Each of the following empirical chapters was written independently and therefore the readers might find some overlap of content within each chapter. Although the component of each chapter is numbered into sections and sub-sections this does not imply an overarching framework. The reader is encouraged to read the chapters by interest, rather than in the order of the presentation.