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TOWARDS DEFINING AMBITION: HOW AND WHEN IT LEADS TO EXTREME BEHAVIOR

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Introduction

Ambition is an intriguing construct that has been commonly discussed by laypeople and philosophers to determine whether it is a virtue or a vice (Pettigrove, 2007). Some philosophers, such as Santayana and Kaufmann, believe it is virtuous whereas, others, such as Aquinas, Locke, and Rousseau, perceive it as vicious (Judge & Kammeyer-Mueller, 2012). We can think about ambitious individuals as those who will reach great personal and societal goals, but we can think about them also as those who stop at nothing and are ready to inflict suffering on others in order to pursue gains. Psychological literature has spent little effort to define ambition and determine its antecedents and consequences. Indeed, this construct has been conceptualized in different ways, from a general personality characteristic to an aspect of extraversion and has been almost exclusively investigated in the job realm.

The present dissertation aims to provide a new definition of ambition, conceptualizing it as a manifestation of the quest for significance. Kruglanski and colleagues (2022) define the significance quest as the fundamental need to matter, to have dignity, and to gain respect. This construct has been employed especially in terrorism literature to explain the reason why terrorists are ready to engage in extreme behavior, such as sacrificing their lives for the sake of an important cause. Recently, Kruglanski and colleagues (2021) suggest that extremism cannot be limited to acts of terrorism, but it concerns each situation in which we experience a motivational imbalance between one need, which suddenly became dominant, and other needs. This condition leads individuals to channel their behavioral, cognitive, and emotional resources in the pursuit of one goal, that overcomes the others, leading to the neglect of

them. As one can imagine, enduring condition of motivational imbalance are detrimental for the individual, in that he/she continues to neglect all other needs that are not the dominant one.

Drawing from the suggestion that ambition is a manifestation of significance quest, we conceive of ambitious individuals as those who constantly strive to achieve valuable goals in order to achieve personal significance. Based on this conceptualization, the present dissertation aims to enrich knowledge about ambition investigating its antecedent and consequences, and especially, verifying that ambition can result in extremism.

Overview

The present dissertation is structured in 7 chapters. Chapter 1 provides a review of the literature regarding ambition and proposes a new conceptualization of this construct. Chapter 2 presents a review on the evidence regarding extreme behavior. Chapter 3 displays the aims of the present dissertation and the studies that were conducted to fulfil those aims. Chapter 4 concerns the first, correlational, study which aimed to test the mediating role of ambition in the relationship between inspiration and extremism. Chapter 5 concerns the second, longitudinal, study, aimed to investigate the relationship between ambition and extreme behavior. Chapter 6 contains correlational results from two samples in which we tested the hypothesis that ambition leads to extremism via obsessive but not via harmonious passion. Chapter 7 contains results from two samples in which we tested the hypothesis that relative deprivation can moderate the relationship between ambition and extreme behavior – in one sample this prediction was tested through a correlational design; in the other sample, the same prediction was tested through an experimental design. In conclusion, the General

discussion offers a summary of the findings embodied in the dissertation, along with their limits and theoretical and practical implications.

Chapter 1

Ambition

The philosophical literature defines ambition as a motivational force that leads people to aspire to many, great, and valuable goals and to do whatever they can to achieve those goals (Pettigrove, 2007). Even if ambition can arise in different realms, playing a key role in motivational dynamics, it has been almost exclusively associated with career advancement in the organizational context (e.g., Hogan & Holland, 2003). Hirschi and Spurk (2021) found that employees' ambition predicted higher organizational commitment and higher chance to get promoted. Similarly, Huang and colleagues (2014) found that ambition, conceived as an aspect of extraversion, predicted a more adaptive performance at work, for instance by anticipating change, proactively changing means to achieve goals at work, and seizing the opportunities to improve. Characterized by strong persistence, ambitious individuals are likely to reach more prestigious positions at work and higher incomes, thus, broadly speaking, greater career success (Jansen & Vinkenburg, 2006; Kern et al., 2009; Otto et al., 2017). In this regard, Ashby and Schoon (2010) investigated the role of teenage career ambitions in predicting social status and earnings. They found that young people high (vs. low) in ambition earn more money in adulthood. Moreover, they found that teenage career ambition predicted social status attainment and earning. Consistent with these findings, ambitious individuals seem to be competitive, achievement oriented, and motivated to acquire wealth and status (Hansson et al., 1983). Otherwise, it is interesting to note that ambition has been found to negatively predict career satisfaction, meaning that

ambitious individuals are constantly dissatisfied with their current situation and need to gain more in order to improve their condition (Judge et al., 1995; Judge & Locke, 1993).

Despite the organizational focus, there are plenty of ambitious individuals outside the business domain. For instance, many professional, ambitious athletes strive for success, respect, and recognition. Gaining success allows people to stand out from others and to have power over those who are less successful, for which many ambitious individuals strongly aim (Hume, 2003). Literature has defined ambition as a personality characteristic, a middle-level trait, and as an aspect of extraversion (Jones, Sherman, & Hogan, 2017; Judge & Kammeyer-Mueller, 2012; DeYoung, Quilty, & Peterson, 2007) but it seems reasonable to say that all ambitious individuals, regardless of field or domain, aim to gain respect and admiration from others (e.g., Aristotle, 1968).

As a first step, the present dissertation aims to provide a clear definition of ambition, enabling the generalization of this construct to different realms other than organizations. In accordance with previous literature (e.g., Judge & Kammeyer-Mueller, 2012; Otto et al., 2017), we identify ambition as a middle-level trait that is related to personality, shaped by temperament, culture and socialization (McCrae & Costa, 1999). Middle-level personality variables can be defined as "units that take an individual's standing on abstract dispositions . . . and give concrete form to their diverse expressions" (Cantor, 1990, p. 735), meaning that they concern what people do with their personality dispositions in a context. Ambition, as a middle-level trait, has a great influence on behavior, particularly prompting people to constantly seek success, attainment, and accomplishment in different realms, whether in their professional life or in service to their communities (Hansson et al., 1983; Judge & Kammeyer-Mueller, 2012). Particularly, we claim that ambitious individuals endeavor to achieve those objectives because they have the superordinate goal to be noticed, respected, and

admired by others for their achievements. Recently, Kruglanski and colleagues (2022) defined the desire to matter, to have dignity, and to gain respect (i.e., achieve success, attainment, and accomplishment) as the quest for significance, a universal motive. By those features, ambition can be conceptualized as a manifestation of the universal motive of significance quest.

Once given the definition of ambition, a second step is needed. It is our aim to investigate which condition generates ambition. We claim that inspiration could serve this function. Inspiration has been defined as a mental process meant to achieve a higher state of knowledge or wisdom, or as the moment when one finds how to translate a creative idea into something concrete (Hart, 1998). Practically, we feel inspired "when insights or ideas imbue a task with a sense of necessity and excitement or when a mentor or role model reveals new possibilities that we would not have recognized on our own" (Trash & Elliot, 2003, p. 871). Consistent with this definition, social comparison theorists found that people are inspired by role models in relevant domains (Lokwood & Kunda, 1997; 1999). Particularly, exposure to an outstanding star in one's realm enhanced participants' self-evaluation and motivation to engage in that realm. In a similar vein, Galliani and Vianello (2012) demonstrated in the organizational context that admiration toward the leader motivated followers to improve their skills and to perform better. Drawing from the findings reviewed above, there is certain evidence that inspiration concerns motivational dynamics (Trash & Elliot, 2003). In fact, inspiration has been demonstrated to be directly related to goal pursuit and attainment. Specifically, Milyavskaya and colleagues (2012) found that inspiration significantly predicted an improvement or attainment in the goal process.

Glancing at the literature revised, we believe that inspiration could be an antecedent of ambition. In fact, given that inspiration, as ambition, is characterized by

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a strong motivational component and plays a notable role in goal process, we believe that inspiration could influence ambitious individuals by improving their persistence toward the attainment of valuable goals. Thus, having the opportunity to encounter a role model or have an insight about a task could bolster one's motivation to achieve the objective of their ambition.

Once hypothesized which condition can activate ambition, a third step seems necessary – determining the consequences of ambition. We conceive ambitious individuals as those who aim for great success and who strive for their goals, often persisting up to and beyond their physical and mental limits. Thus, we hypothesized that ambition can result in extreme behavior.

Chapter 2

Extreme behavior

Kruglanski and colleagues (2021) defined extreme states or events as "infrequent phenomena whose rarity results from a pronounced intensity or magnitude of their underlying motivation" (p. 265). In their conceptualization, humans typically find themselves in a state of motivational balance, where all their basic needs are satisfied. However, it may happen that one need becomes predominant over other basic needs, generating a state of motivational imbalance. Such imbalance implies that behaviors devoted to satisfaction of the dominant need are enacted, leading to the sacrifice of other needs and thus to extreme behavior. Extremism has cognitive, affective, behavioral, and social consequences. When one need dominates over other needs, individuals devote their energies, attention, thoughts, and actions toward the satisfaction of the prioritized need. Consequently, people become emotionally dependent on the developments in the dominant need fulfilment and neglect other needs. Such negligence, if prolonged over time, can impact society. As reported by Kruglanski and colleagues (2021), according to the National Institute of Drug Abuse, the costs of abuse of tobacco, alcohol, and illicit drugs in the United States require over \$740 billion annually due to the costs related to crime, lost work productivity, and health care.

Even if extreme behavior is usually enlightened for its damaging consequences, it can have beneficial effects. Extremism can be useful, for instance, in coping with emergency which requires a considerable response (i.e., channeling one's resources into one goal) to face it. Furthermore, extremism can benefit the process of objective

achievement by making one's attention focused on a particular task until the goal is reached. In fact, only when extremism is chronic, it becomes damaging. As Kruglanski and colleagues (2021) mentioned, extremism can be found in various contexts, from eating disorders to extreme sports and terrorism.

Literature has identified the quest for significance as the principal antecedent of such behavior. Indeed, people who search for significance typically engage in extreme behavior in order to gain prestige and recognition (Kruglanski & Bertelsen, 2020). In this vein, Dugas et al. (2016) demonstrated that after recalling a sacrifice on behalf of a cause, participants reported greater pride, personal worth, significance and purpose in life. Otherwise, Leary et al. (2003) analyzed episodes of school shooting (i.e., extreme behavior) in the United States and found that such extreme behavior was motivated by the need to restore significance. Similarly, Jasko, LaFree and Kruglanski (2017) found in a sample of individuals who had committed ideologically motivated crimes in the United States, that quest for significance positively predicted the use of extreme means (e.g., political violence).

More evidence of extreme behavior as a consequence of quest for significance has come from the terrorism literature. Bélanger (2013) reported that members of Liberation Tigers of Tamil Eelam who felt insignificance (i.e., who were searching for respect and dignity) were more prone to support extreme behavior, such as political violence. Similarly, people who are ready to self-sacrifice on behalf of a cause (e.g., commit suicide bombing for the sake of Allah) seem to be moved by the desire to restore their lost significance (Kruglanski et al., 2013). Another example of the effect of quest for significance on extreme behavior is furnished by Webber and colleagues (2017). The authors found that quest for significance was the primary motive underlying suicidal attacks from various parts in the world.

Although extremism tends to be equated with violent extremism and terrorism, not all extreme behaviors are antisocial. On one hand, extremism may involve sacrificing oneself for the sake of one's religion or conquering countries all over the world for the sake of being recognized as a legendary figure. On the other hand, extremism may involve committing oneself to practicing a sport for hours every day in the hopes of winning gold medals. Literature found that the same variables, such as the quest for significance, which lead to aggressive outcomes in some studies, are related to benevolent and peaceful behaviors in others. For instance, Simon, Trötschel, and Dähne (2008) found that when participants were uncertain about whether they were accepted by a peace movement which they were strongly identified with (i.e., they were seeking for significance), they donated more, not less, money to the cause as compared to when they were certain to be accepted. In a similar vein, Volhardt (2009) demonstrated that suffering and adverse life events can promote altruism and prosocial behavior in order to gain significance. Additionally, research by Dugas and colleagues (2016) demonstrated that Iraqi and Palestinian refugees living in Jordan with high desire for significance were more prone to undergo nonviolent self-sacrifice, intense suffering, or forego material wealth for the cause.

Therefore, extremism as such does not entail violence. Along with the quest for significance, research has shown that the social network in which one is embedded plays an important role in initiation and maintenance of extreme behavior, whether prosocial or antisocial (Kruglanski et al., 2017). Networks can vary from informal groups such as friends or family members, to formal organizations committed to a shared purpose (Sageman, 2004; 2008). Social network prescribes how one should behave to gain recognition from the group and to be accepted by the other members (Bélanger et al., 2018).

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On one hand, the mere fact to join a group can increase the willingness to engage in extreme behavior in the sake of a collective cause (Willer, 2009). Indeed, when individuals join a group, their identity, at least partly, fuses with that of the group leading them to experience feelings of belongingness and a sense of "oneness" with other group members (e.g., Tajfel & Turner, 1979). These emotions can induce people to believe that they share core characteristics (e.g., genes, values) with other group members, increasing their willingness to sacrifice for the group (Swann et al., 2014). To support this reasoning, Orehek and colleagues (2014) primed participants with plural (vs. singular) pronouns and found that participants were more incline to selfsacrifice for group members, but not for strangers. Similar results were obtained by Swann et al. (2010) who found that individuals more (vs. less) "fused" with their group were more prone to donate money for a group cause or to sacrifice themselves and endorse fighting for the sake of the group.

On the other hand, being connected to particular networks can increase individuals' likelihood to engage in extreme behavior. For instance, research found that individuals who had connections to violent friends and significant others were more likely to be violent (Jasko et al., 2017). Similarly, Jasko and colleagues (2020) conducted a study in three different geo-political contexts (Sri Lanka, Morocco, and Indonesia) and found that participants with connections to radicalized social networks (e.g., residents of a radical neighborhood) were more likely to exhibit violent extremism than participants belonging to moderate networks (e.g., residents of a moderate neighborhood).

What makes the difference between a radical and moderate social network? The narrative supported by each context. Narrative describes how the world generally functions in a specific context and which are the goals worthy to pursue (Kruglanski et

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al., 2018). Through commitment to those goals, people affirm their identity and establish that their life matters (George & Park, 2016; Steele, 1988). Thus, a narrative that privileges one type of value (e.g., money) over competing values can induce to extreme behavior because it selectively activates certain goals while neglecting others (Kruglanski et al., 2017). People from different contexts internalize the culturally approved narrative (or ideology) they are exposed to so that their decision-making and goal-related behavior are influenced by that narrative (Bélanger et al., 2018). For instance, a narrative may identify using violence against a common enemy as moral and acceptable (Hasbrouck, 2020). Thus, individuals exposed to violence-promoting narrative will be more likely to engage in violent extremism, because the narrative justifies violence as an effective mean (Kruglanski et al., 2013; 2015; 2018).

However, not all narratives support violence. For instance, narratives may encourage hard work and pursuit of a career (Kruglanski et al., 2018). Otherwise, narratives may promote building peace and equality through justice and conciliation (Bélanger et al., 2018). Social networks can influence the extent to engage in prosocial (vs. antisocial) extremism by validating that a peaceful (vs. violent) mean is an appropriate way to pursue a common cause. The importance of narrative and networks, along with the quest for significance, in initiation and maintenance of extreme behavior is also proved by literature regarding deradicalization in extremist groups. In this regard, literature on terrorism reported that increasing loyalty to a different group or supporting a different cause that rejects violence induces individuals to disengage from a terrorist group (Demant & de Graaf, 2010; Reinares, 2011). Other strategies useful to discourage extremism may involve individuals' realization that the extreme activity is not a worth mean to the cause or a substitution of the narrative with one that embraces plural values (Tetlock, 1986).

Together with network and narrative, literature has identified possible individual characteristics that play a role in the maintenance of extremism. Drawing from the definition of motivational imbalance which states that it arises when one need becomes predominant over other basic needs, we can discuss various needs that can generate motivational imbalance. In this regard, Kruglanski and colleagues (2017) suggest that individuals chronically high on a given need such as need for achievement, social approval, or sensation seeking, would probably endorse it over others. Similarly, people high in the need for cognitive closure are able to remain committed to a focal goal even at the expense of other goals (Shah, Friedman, & Kruglanski, 2002). Moreover, the way one pursues the beloved activities can predispose them to extremism. Indeed, individuals who have an obsessive (vs. harmonious) passion towards their goals are more inclined to motivational imbalance, in that they privilege a given activity over others. In this vein, a study conducted by Bélanger and colleagues (2013) found that obsessively passionate individuals were significantly more prone to select extreme means concerning their passion.

The evidence reviewed above about extremism concerns mainly literature on terrorism, even if Kruglanski and colleagues (2021) suggest that motivational imbalance can be referred to any circumstance in which one need overcomes the others. In this vein, the present dissertation aims to investigate extremism outside of the terrorism domain, claiming that ambitious individuals, characterized by strong persistence to the superordinate goal to attain recognition, could be inclined to engage in extreme behavior. The next chapter explains the purpose of the present dissertation.

Chapter 3

Current research

The present dissertation aims to pursue two main goals. First, it strives for defining ambition as a characteristic relevant to different realms. This construct, indeed, has been primarily investigated in the job domain in relation to career advancement, leaving unexplored possible antecedents and other outcomes outside of the organizational realm. Due to this restricted investigation, literature has not provided a clear definition of ambition. Therefore, to fulfil the first purpose we provided definition of ambitious individuals as those characterized by strong persistence towards various, valuable goals in different realms with the superordinate goal to achieve respect and admiration by others. By those features, we believe that ambition is a manifestation of the quest for significance that is the fundamental need to matter, have dignity, and be respected. The second purpose of the present dissertation is to enrich knowledge about antecedents and consequences of ambition, and particularly to test the hypothesis that inspiration can activate ambition and that ambition can lead to extreme behavior.

To fulfil our goals, we conducted 4 studies. Study 1, in a cross-sectional design and employing a sample of Italian adults, tested the hypothesis that inspiration could activate ambition, which, in turn, could lead to extreme behavior. Study 2 investigated in a sample of undergraduate students whether ambition leads to extreme behavior through a longitudinal design. Study 3 employed an Italian and an American sample in a cross-sectional design to test the hypothesis that ambition can lead to extremism through obsessive, but not harmonious, passion. Study 4 employed two sample to test the hypothesis that the relationship between ambition and extreme behavior is

moderated by relative deprivation. In Sample 4a we tested the hypothesis through a cross-sectional design and employing an American sample, in Sample 4b we tested the hypothesis through an experimental design and employing an Italian sample.

All the studies embodied in the present dissertation were approved by the Ethics Committee of Department of Developmental and Social Psychology at Sapienza University of Rome (protocol 808).

Chapter 4

Study 1: Antecedents and consequences of ambition

Introduction

One of the main purposes of the present dissertation is to investigate antecedents and consequences of ambition. As mentioned in Chapter 1, we claim that inspiration could activate ambition. Indeed, literature defines inspiration as insights about a task or new possibilities illustrated by a mentor or role model (Trash & Elliot, 2003). Those new inputs have been demonstrated to favor the process of goal attainment by increasing motivation, improving skills, and performing better (e.g., Lokwood & Kunda, 1997; Galliani & Vianello, 2012). By those feature we believe that inspiration can increase individuals' ambitiousness to strive for valuable goals.

On the other side, we believe that the intense striving towards the attainment of respect and recognition that characterizes ambitious individuals can lead them to channel their cognitive, emotional, and behavioral resources toward the one goal they most value. This would result in a motivational imbalance between the object of their ambition and other goals (Kruglanski et al., 2021). For this reason, we believe that ambition can lead to extremism.

Purpose of the Study

In the present chapter, employing an Italian sample, we tested a mediation model with the hypothesis that inspiration can lead to extremism through ambition. Particularly, we believe that being exposed to role models or having insights about a task can increase one's level of ambitiousness, which, in turn, would lead to the engagement in extremism.

Method

Procedures, Design and Participants. To determine the minimum sample size for the mediation model, we employed the online tool "Monte Carlo Power Analysis for Indirect Effects" by Schoemann, Boulton, and Short (2017). Assuming medium effect sizes, the confidence level set at 95 percent, and power set at .80, 5,000 Monte Carlo simulations suggested a sample of at least 157 to detect the indirect effect of inspiration on extremism through ambition. Given that we recruited participants online through Prolific and we needed to ensure that enough of them completed the survey, we decided to enroll 225 individuals to take part in a cross-sectional study. Participants (56.4 percent female) were Italian undergraduate students aged 19 to 44 years old (M = 22.51, *SD* = 2.64). After providing informed consent, each participant filled out an online questionnaire through Qualtrics aimed at assessing inspiration, ambition, and extremism.

Measures

Inspiration. Participants' inspiration was assessed through a five-item measure created *ad hoc*. Individuals were asked to indicate their agreement with statements regarding the influence of successful models in impacting their ambition (e.g., "*I feel encouraged by impactful people to realize my ambitions*"). Responses were obtained on a five-point Likert scale (1 = "Definitely disagree"; 5 = "Definitely agree") and were averaged to form a single inspiration score (Cronbach's alpha = .86). The items of the Inspiration scale can be found in Appendix A.

Ambition. Participants' ambition was assessed through an adapted version of an unpublished measure. This measure was developed by Dr. Duckworth, but it was never validated nor included in the Grit Scale (Moore et al., 2018). Individuals were asked to indicate the extent to which they stive for success and valuable goals (five items; e.g., "*The highest goal in life is achieving something important and long-lasting*"). Responses were recorded on a five-point Likert scale (1 = "Definitely disagree"; 5 = "Definitely agree") and were averaged to form a single ambition score (Cronbach's alpha = .81). The items of the Ambition Scale can be found in Appendix B.

Extremism. The proneness to extremism was assessed through an adjusted version of the Extremism Scale (Szumowska et al., 2020). The original version of the Extremism Scale was in English; thus, we translated the Extremism Scale in Italian under the supervision of a bilingual collaborator. Participants were asked to indicate the extent to which their life was dominated by one main goal (twelve items, e.g., "*I usually invest all of my time and energy into the one thing that matters to me the most*"). Items were rated on a 7-point Likert scale (1 = "Definitely disagree"; 7 = "Definitely agree") and were averaged to form a single extremism score (Cronbach's alpha = .92). The items of the Extremism Scale can be found in Appendix C.

Results

In Study 1 we wanted to test the hypothesis that inspiration can be considered an antecedent of ambition, while extremism can be considered a consequence of ambition. More specifically, we wanted to test the hypothesis that inspiration leads to extremism through ambition. As shown in Table 1, we found a strong and positive correlation between inspiration and ambition. We also found a positive, although less

strong, correlation between ambition and extremism as well as between inspiration and extremism.

Table 1

Descriptive Statistics and Correlation between Inspiration, Ambition, and

Extremism

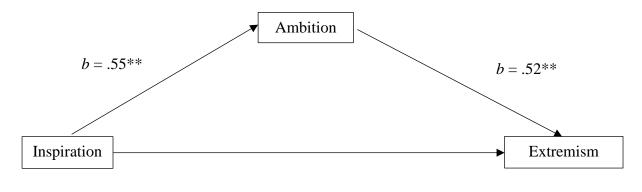
| | M (SD) | 1 | 2 | 3 |
|----------------|-------------|-------|-------|---|
| 1. Inspiration | 3.39 (.93) | - | | |
| 2. Ambition | 3.57 (.84) | .61** | - | |
| 3. Extremism | 3.55 (1.25) | .24** | .37** | - |
| | | | | |

***p* < .01

To test the mediation model, we used PROCESS v3.5, Model 4 (Hayes, 2018) and bias corrected confidence intervals were obtained with 5,000 bootstrap samples. As displayed in Figure 1, the results of the mediation model showed that inspiration positively predicted ambition [b = .55, SE = .05, t = 11.41, p < .001, (95% CI = .46, .65)], which, in turn, positively predicted extremism [b = .52, SE = .12, t = 4.47, p < .001, (95% CI = .29, .75)]. Inspiration, instead, did not predict extremism [b = .04, SE = .11, t = .40, p = .692, (95% CI = -.17, .25)]. Moreover, we found a significant and positive indirect effect of inspiration on extremism via ambition [Effect = .29, SE = .07, (95% CI = .15, .41)].

Figure 1

Coefficients Representing Effects of Inspiration on Ambition and Extremism



 $b = .04 (.33^{**})$

Note. The total effect of Inspiration on Extremism is included in parenthesis. **p < .001

Discussion

The aim of Study 1 was to investigate possible antecedent and consequence of ambition. Therefore, we tested a mediation model with the hypothesis that inspiration could activate ambition, which, in turn, would lead to extremism. Our predictions were confirmed through a cross-sectional design and employing a sample of Italian undergraduate students. We found that inspiration increases ambition which in turn increases extremism. Thus, it seems that the exposure to role models or insights about a task can increase levels of ambitiousness which, in turn, propels individuals to channel their cognitive and behavioral energies toward one main goal in spite of others. As expected, the effect of inspiration on extremism was not significant, meaning that being

inspired, in itself, does not lead to engage in extremism. Rather, this effect is totally channeled in ambitiousness, through which inspiration can result in extremism.

The findings of Study 1 constitute the first evidence that inspiration can activate ambition and that ambition can lead to engage in extremism. However, the correlational nature of the data prevented us from drawing causal inference. Moreover, to assess extremism we used the Extremism Scale which is aimed to measure extremism in general. Specifically, this scale assesses the extent to which cognitive, emotional, and behavioral resources are devoted toward a general main goal, rather than behavioral actions toward specific goals. Study 2, presented in Chapter 5, addressed those issues.

Chapter 5

Study 2: Does ambition lead to extreme behavior?

Purpose of the Study

Study 2 aimed to further support the findings of Study 1, thus we hypothesized that ambition can lead to extreme behavior. Specifically, we tested this hypothesis in a sample of undergraduate Italian students and employing a longitudinal design, which partially addresses the issue of collational data of Study 1. Moreover, in Study 2 we decided to use a different measure of extremism, designed to assess extreme behavior toward a specific goal, listed by participants, rather than extremism in general.

Method

Procedures, Design and Participants. An a priori power analysis using G*Power 3.1.9.4 (Faul et al., 2009), assuming medium effect size ($f^2 = .15$), with two predictors, power set to .80 and α set to .05, revealed a required sample size of 68. Given the longitudinal nature of the study we decided to recruit more participants to reach a minimum sample size which completed the measures at both Time 1 and Time 2. We enrolled 128 Italian undergraduate students at Sapienza University of Rome to take part in a longitudinal study. Among participants, 108 individuals (63.9 percent female) aged 21 to 55 years old (M = 24.27, SD = 3.96) completed the measures at both Time 1 and 2, constituting the final sample. Participants were first recruited at the university and during the month of February 2020 and were asked to fill out a questionnaire aimed at assessing ambition and extreme behavior. Subsequently,

participants were recontacted during the month of May 2020, and were asked to fill out an online questionnaire aimed to assess extreme behavior.

Measures

Ambition. Participants' ambitiousness was assessed on February 2020 via the same scale employed in Study 1. In this sample, the Ambition scale showed acceptable reliability (Cronbach's alpha = .77).

Extreme Behavior. Participants' proneness to engage in extreme behavior was assessed through an abridged version of the Self-Sacrifice Scale (Bélanger et al., 2014). First, participants were asked to list a cause they considered personally important. Subsequently, they responded to five items designed to evaluate how much they would sacrifice their relations with relatives, their money, or themselves, for the sake of the cause they listed (e.g., "*I would defend a cause to which I am truly committed even if my loved ones rejected me*"). Responses were provided on a seven-point Likert scale (1 = "*Do not agree at all*"; 7 = "*Very strongly agree*") and were averaged to form a single extreme behavior score at Time 1 (Cronbach's alpha = .66) and a single extreme behavior score at Time 2 (Cronbach's alpha = .78). The items of the Self-Sacrifice Scale can be found in Appendix D.

Results

Table 2

Descriptive Statistics and Correlation between Ambition, Self-Sacrifice at Time 1 and Self-Sacrifice at Time 2

| | M (SD) | 1 | 2 | 3 | |
|----------------------|-------------|------|-------|---|--|
| 1. Ambition | 3.83 (.68) | - | | | |
| 2. Self-Sacrifice T1 | 4.66 (1.00) | .10 | - | | |
| 3. Self-Sacrifice T2 | 4.58 (1.07) | .23* | .53** | - | |

Note. Self-Sacrifice T1 = Self-Sacrifice at Time 1 (February 2020), Self-Sacrifice T2 = Self-Sacrifice at Time 2 (May 2020)

p* < .05. *p* < .01

As Table 2 displays, we did not find a relation between ambition and selfsacrifice at Time 1. However, as expected, we found a strong positive correlation between ambition and self-sacrifice at Time 2 and between self-sacrifice at Time 1 and self-sacrifice at Time 2. To test the effect of ambition on self-sacrifice at Time 2, controlling for self-sacrifice at Time 1, we ran a multiple regression in which ambition and self-sacrifice at Time 1 were entered as predictors, while self-sacrifice at Time 2 was entered as criteria. Results showed that ambition positively predicted self-sacrifice at Time 2 [β = .18, *SE* = .13, *t* = 2.23, *p* = .028, (95% CI = .03, .54)], controlling for self-sacrifice at Time 1 [β = .51, *SE* = .09, *t* = 6.22, *p* < .001, (95% CI = .37, .71)].

Discussion

The aim of Study 2 was to provide further support to the notion that ambition can result in extreme behavior. We tested this prediction through a longitudinal design and employing a sample of undergraduate Italian students. The results of Study 2 confirmed once again that ambitious individuals are prone to engage in extreme behavior. Specifically, findings of Study 2 confirm those of Study 1, employing a measure of extreme behavior different from the one previously used. In the present study participants were asked to list a goal very dear to them and then to indicate the extent to which they would sacrifice in the sake of such goal. In conclusion, it seems that the relationship hypothesized between ambition and extreme behavior actually exists and can be generalized to different kind of extremism.

Chapter 6

Study 3: How ambition leads to extremism: Harmonious vs. obsessive passion

Introduction

Even though we have established that ambition leads to extreme behavior, the motivational dynamics that underlie this relationship remain unclear. It must be noted that there are many ambitious people who are not extreme. The aim of Study 3 is, thus, to investigate how ambition can result in extremism. We propose that ambition leads to extremism through passion. In fact, St-Louis, Carbonneau, and Vallerand (2016) define passion as "a strong inclination toward a self-defining cause that is loved and valued, and in which people invest a significant amount of time and energy" (p. 263). According to Judge & Kammeyer-Mueller (2012), persistence and goal attainment are characteristics of ambitious individuals. In fact, ambition involves strong commitment to one's own goals and determination to reach them, which means that people will actively implement a series of actions to gain those ends (Pettigrove, 2007). It therefore seems logical that ambition is related to passion, which concerns the way one pursues goals to which they are highly committed. However, there are different types of passion.

The Dualistic Model of Passion

Vallerand et al. (2003) identified two distinct kinds of passion: harmonious passion and obsessive passion, which differ in the way the passionate activity is integrated in one's life. Specifically, *obsessive* passion refers to that which consumes one's complete attention and energy, overwhelming other spheres of life. This label

might easily be applied to Madame Curie, one of the greatest scientists of all time, who lived "in a world quite removed from human beings" (Goldsmith, 2005, p. 59-60). In contrast, *harmonious* passion refers to that which is important, but not singularly important such that it cannot exist simultaneously with other parts of one's identity (Vallerand et al., 2003). Thus, this is the case in which one perceives the activity as an important aspect of the self, living in harmony with other life domains (Vallerand, 2010). In fact, harmoniously passionate individuals have control over the beloved activity, and they freely decide when to undertake it (Bélanger et al., 2013). Serena Williams, as a fashion designer and mother in addition to a tennis player, is perhaps a better example of harmonious passion. Importantly, as is exemplified by Serena Williams, great success is not limited to those who engage in extremism in order to pursue their goals. In fact, studies have found that harmonious passion is more consistently linked to performance success than obsessive passion, perhaps because such performance success as a result of the deliberate practice predicted by obsessive passion is curtailed by the accompanying stress, which is not associated with harmonious passion (Vallerand et al., 2008).

Obsessive Passion

Obsessive passion, unlike harmonious passion, is associated with goal conflicts, thereby leading to suppression of alternative goals that are unrelated to the object of one's obsessive passion (Bélanger, et al., 2013). In this way, obsessive passion is related to the motivational imbalance theory of extremism, wherein the need for significance overrides alternative needs, including those related to self-preservation (Kruglanski et al., 2021). Obsessive passion can be related to the need for significance. Lafreniére, and colleagues (2011) found that individuals who are low on implicit self-esteem, and

hence, have low significance and tend toward defensiveness, experience higher levels of obsessive passion.

The significance quest theory holds that "in case a given behavior failed to result in gratifying the need for significance, other equifinal behaviors will be undertaken for that purpose" (Kruglanski et al., 2022). Similarly, obsessive passion may also have a counter-final facet, presenting as a compensatory strategy in reaction to unsatisfied needs in realms outside the source of passion (Lalande et al., 2017). In this view, obsessively passionate people may not necessarily ignore all other aspects of their life *in favor* of the object of their passion, but rather may obsessively pursue that object of their passion because they have not been able to attain significance in other areas of life in ways that are consistent with their culture's norms and values. Obsessive passion may therefore be a result of lost significance, which can also be an antecedent for extremism.

Ambition, the Quest for Significance, and Obsessive Passion

As the foregoing section suggests, lost significance can situationally activate obsessive passion. Of course, loss (or threatened loss) of significance is one of two key activating factors for the significance quest, alongside the opportunity for significance gain. As we argued in Chapter 1, ambition, too, is closely related to the quest for significance. If ambition is a manifestation of significance quest aimed at becoming respected for one's greatness and success, it stands to reason that ambition may also be predictive of obsessive passion. As previously noted, however, there is no reason to believe that ambition would not also be predictive of harmonious passion. What, then, is the difference between Marie Curie, who suffered bouts of depression and eventually died of aplastic anemia from radiation exposure due to the amount of time she spent in

her lab, and Serena Williams, who has appeared to achieve great social significance without sacrificing her family and other interests? Both were/are ambitious; both were/are passionate about what they did/do. The former exhibited extremism; the latter does not. Perhaps extremism, therefore, depends not only on ambition to achieve greatness (i.e., significance), but also on an obsessive passion for the area in which the person desires to achieve greatness.

Purpose of the Study

Based on the literature reviewed above, in the present chapter we will test the hypothesis that ambition can lead to extremism – whether prosocial or antisocial – through obsessive passion but not through harmonious passion. We propose that ambition, as a specific type of significance quest, can lead to extremism, just as the quest for significance can result in extremism. Moreover, we posit that the relationship between ambition and extremism is mediated by obsessive passion. We hold that ambition can result in individuals pursuing their goals in harmonious and obsessive ways, but that only obsessive passion predicts extremism.

We investigated the mediating role of the two different types of passion between ambition and extremism in two different sample. In Study 3a, we used an Italian sample to test the hypothesis that ambitious individuals are prone to extremism through obsessive, but not harmonious, passion. In Study 3b, we tested the same mediation model in an American sample. In both samples we employed a new measure to assess ambition compared to that employed in the first two studies. As previously argued, literature does not provide a validated measure of ambition and for this reason we employed in the first two studies a scale that was not validated. In the present chapter, instead, we employed a measure of ambition that we developed on the basis of our definition of this construct.

Analysis Strategy

To determine the minimum sample size for the mediation model, we used the online tool "Monte Carlo Power Analysis for Indirect Effects" by Schoemann, Boulton, and Short (2017). Assuming medium effect sizes, the confidence level set at 95 percent, and power set at .80, 5,000 Monte Carlo simulations suggested a sample of 207 to detect the first indirect effect of ambition on extremism through obsessive passion and 212 to detect the second indirect effect of ambition on extremism through harmonious passion. To test the mediation model, we used PROCESS v3.5, Model 4 (Hayes, 2018) and bias corrected confidence intervals were obtained with 5,000 bootstrap samples.

Furthermore, we tested the invariance of the mediation model across gender and countries using the package pathj for Structural Equation Modeling (SEM) in jamovi Version 1.8. Particularly, we used multi-group path analyses to test whether the effects found in the mediation model were the same when comparing males with females and Italian with American participants. We ran the multi-group analyses setting equality constraints on the indirect effect of ambition on extremism through both obsessive and harmonious passion and on the direct effect of ambition on extremism.

Study 3a

Method

Procedures, Design and Participants. We decided to recruit 249 Italian adults (55.4 percent male) aged 18 to 50 years old (M = 27.19, SD = 7.34) to take part in a cross-sectional study. We included only participants aged between 18 and 50 years old

because we decided to focus on the adult population. However, we wanted to avoid high variability in relation to age. Thus, we recruited participants only up to 50 years old. In the sample, 49 percent participants had a higher education, 42.2 percent had a bachelor's degree, and 5.6 percent had a PhD degree. Participants were recruited online through a paid procedure provided by Prolific. After giving their informed consent, each participant filled out an online questionnaire through Qualtrics aimed at assessing ambition, passion, and extremism.

Measures

Ambition. Individuals' ambition was assessed through the Ambition Scale (Resta et al., 2022a). Participants were asked to indicate their agreement with statements regarding personal goals and several characteristics of ambitious individuals like aiming at success or recognition and respect from others (ten items, e.g., "*One of my goals is doing something that leaves a mark*"). Items were rated on a five-point Likert scale (1 = "Definitely disagree"; 5 = "Definitely agree") and were averaged to form a single ambition score (Cronbach's alpha = .89). The items of the Ambition Scale can be found in Appendix E.

Passion. Harmonious and obsessive passion were assessed using the Italian version of the Passion Scale, adapted from the work of Marsh et al. (2013). Participants were asked to list an activity very important to them and, subsequently, to indicate their agreement with twelve statements while thinking about this activity. The items aimed to assess harmonious passion (six items, e.g., "*This activity is in harmony with the other activities in my life*"), and obsessive passion (six items, e.g., "*I have difficulties controlling my urge to engage in this activity*"). Answers were provided through a seven-point Likert scale (1 ="*Totally disagree*"; 7 = "*Totally agree*") and were

averaged to form a single harmonious passion score (Cronbach's alpha = .68) and a single obsessive passion score (Cronbach's alpha = .83). The items of the Passion Scale can be found in Appendix F.

Extremism. The proneness to extremism was assessed through the same scale employed in Study 1. The Extremism scale showed an excellent reliability (Cronbach's alpha = .95).

Results

The present study investigates the hypothesis that ambition can lead to extremism through obsessive passion *and not* through harmonious passion. Table 3 shows types of passionate activity listed in the Passion Scale and the percentage of participants engaged in each one.

Table 3

Types of Passionate Activity Listed in the Passion Scale and the Percentage of

Participants Engaging in Each One

| Passionate Activity | Examples of Activity | % of Participants | |
|----------------------------|--------------------------------------|-------------------|--|
| Hobby | Listening to music, cooking, | 52.2% | |
| | watching films/TV series | 32.270 | |
| Sport | Basketball, cycling, running | 16.5% | |
| Job | Business, Psychologist, Doctor | 10.4% | |
| Education | Studying | 9.6% | |
| Interpersonal relationship | Spending time with | 7.2% | |
| | partner/family/friends, volunteering | 1.2% | |
| Culture | Going to the theatre, reding poems, | 2.4% | |
| Culture | visiting museums | 2.4% | |
| Life goal | Working on oneself, upholding | 1 60/ | |
| | human rights, acquiring new skills | 1.6% | |
| Total | | 100% | |

Correlations between variables are presented in Table 4. As expected, we found a positive correlation between ambition and both harmonious and obsessive passion and between ambition and extremism. Moreover, obsessive passion was highly and positively correlated to extremism while harmonious passion was not correlated with extremism, consistent with the literature (Lafrenière et al., 2009).

Table 4

Descriptive Statistics and Correlations between Ambition, Obsessive and Harmonious Passion, and Extremism

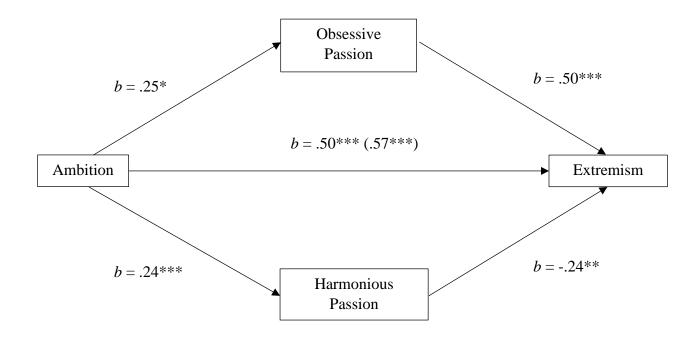
| | M (SD) | 1 | 2 | 3 | 4 |
|-----------------------|-------------|-------|-------|-----|---|
| 1. Ambition | 3.23 (.84) | - | | | |
| 2. Obsessive Passion | 3.88 (1.46) | .14* | - | | |
| 3. Harmonious Passion | 5.23 (.93) | .22** | .27** | - | |
| 4. Extremism | 3.33 (1.44) | .33** | .51** | .04 | - |

p* < .05. *p* < .01

As can be seen in Figure 2, the results of the mediation model showed that ambition positively predicted obsessive passion [b = .25, SE = .11, t = 2.24, p = .03, (95% CI = .03, .46)], which, in turn, positively predicted extremism [b = .50, SE = .05, t = 9.48, p < .001, (95% CI = .40, .61)]. Ambition also positively predicted harmonious passion [b = .24, SE = .07, t = 3.46, p < .001, (95% CI = .10, .37)], which, in turn, negatively predicted extremism [b = -.24, SE = .08, t = -2.87, p = .005, (95% CI = .41, -.08)].

Figure 2

Coefficients Representing Effects of Ambition on Passion and Extremism



Note. The total effect of Ambition on Extremism is included in parenthesis.

*
$$p < .05$$
. ** $p < .01$. *** $p < .001$

Moreover, we found a significant and positive indirect effect of ambition on extremism via obsessive passion [Effect = .12, SE = .06, (95% CI = .01, .24)] and a significant and negative indirect effect of ambition on extremism via harmonious passion [Effect = -.06, SE = .03, (95% CI = -.13, -.01)]. The results of the pairwise contrast of the indirect effects showed that the specific indirect effect through obsessive passion, with a

95% CI of .05 to .31. The results also showed a significant positive direct effect of ambition on extremism. Controlling for age and gender did not change the pattern of results.

Given the correlational nature of the data, we tested an alternative model in which obsessive passion predicted ambition, which, in turn, predicted extremism. To test the alternative model, we used PROCESS v3.5, Model 4 (Hayes, 2018). Particularly, we ran the mediation model using obsessive passion as independent variable, ambition as mediator, extremism as dependent variable and harmonious passion as covariate. As expected, the results showed no significant indirect effect of obsessive passion on extremism through ambition [Effect = .03, *SE* = .02, (95% CI = .01, .07)].

Discussion

In the first sample, we aimed to investigate the relationship between ambition and extremism, and, more specifically, the mediating role of passion in this relationship. Based on the suggestion that ambition constitutes a version of quest for significance and given the established relationship between significance quest and extremism, we hypothesized that ambition could similarly lead to extremism. Particularly, we wanted to demonstrate that ambitious individuals are more prone to extremism via obsessive passion, and not via harmonious passion. The results obtained in Study 3a supported our hypothesis. Specifically, we found that ambitious individuals are prone to engage in their activities both in an obsessive and harmonious way. However, only obsessive passion led to greater proneness to extremism. Harmonious passion, indeed, negatively predicted extremism.

Our results suggest that ambitious individuals are prone to develop both obsessive and harmonious passion toward activities to which they are strongly committed. However, only when ambition is funneled into obsessive passion, then individuals are prone to extremism. In fact, when ambitious individuals develop a harmonious passion, they are less prone to engage in extremism. We also found a noticeable difference between indirect effects, suggesting that obsessive passion had a greater impact than harmonious passion in mediating the relationship between ambition and extremism. Finally, we found a direct effect of ambition on extremism. Thus, it is important to bear in mind that it is not only passion that has an influence on extremism. Indeed, ambitious individuals can directly engage in extremism, independently of the kind of passion they exhibit.

These results are consistent with literature on passion (e.g., Bélanger et al., 2013) and seem to constitute further evidence that ambition, like the quest for significance more broadly, is associated with extremism. Additionally, our findings contribute to the existing knowledge about the dynamics and consequences of ambition.

Due to the correlational nature of the data, we were not able to draw causal inferences. Thus, we tested the alternative model in which obsessive passion was the independent variable and ambition was the mediator. The results showed that the indirect effect of obsessive passion on extremism via ambition, controlling for harmonious passion, was not significant, thus corroborating our hypotheses. In order to replicate our results in a different sample, we conducted a second study.

Study 3b

Though the results of Study 3a were consistent with our hypotheses, we conducted a second study to bolster our hypotheses and generalize our findings. In

Study 3b, we tested the same mediation model in a different population. Our aim was to replicate the results obtained in Study 3a through sample of different nationality. We used the same analysis strategy employed in Study 3a.

Method

Procedures, Design and Participants. As in Study 3a, we decided to recruit only participants aged between 18 and 50 years old in order to avoid high variability in relation to age. Three hundred American adults (55.7 percent male; $M_{age} = 31.29$, $SD_{age} = 8.47$) were recruited online though paid procedure, provided by Prolific, to take part in a correlational study. In the sample, 17 percent of the participants had high school education, 32.3 percent had a bachelor's degree and 4.7 percent had a PhD degree. After giving informed consent, each participant filled out an online questionnaire through Qualtrics aimed at assessing ambition, passion, and extremism.

Measures

Ambition, Passion, and Extremism. Participants responded to the English version of the Ambition Scale (Resta et al., 2022a), employed in Study 3a. In the present sample, the Ambition Scale showed an excellent reliability (Cronbach's alpha = .91). Subsequently, participants responded to the English version of the Passion Scale (Marsh et al., 2013) that was used in Study 3a. The harmonious passion score showed a good reliability (Cronbach's alpha = .83); as did the obsessive passion score (Cronbach's alpha = .84). Finally, participants filled out the Extremism Scale (Szumowska et al., 2020), employed in the Study 1 and 3a, which showed an excellent reliability (Cronbach's alpha = .94).

Results

As in Study 3a, our aim was to demonstrate that ambition can lead to extremism through obsessive passion *and not* through harmonious passion. Table 5 shows types of passionate activity listed in the Passion Scale and the percentage of participants engaged in each one.

Table 5

Types of Passionate Activity Listed in the Passion Scale and the Percentage of Participants Engaging in Each One

| Passionate Activity | Examples of Activity | % of Participants | |
|----------------------------|------------------------------|-------------------|--|
| Hobby | Listening to music, cooking, | 54% | |
| поору | watching films/TV series | 5470 | |
| Sport | Basketball, cycling, running | 20.3% | |
| | Spending time with | | |
| Interpersonal relationship | partner/family/friends, | 11% | |
| | volunteering | | |
| T - 1- | Business, Psychologist, | 5 20/ | |
| Job | Doctor | 5.3% | |
| | Working on oneself, | | |
| Life goal | upholding human rights, | 3% | |
| | acquiring new skills | | |
| Education | Studying | 2.3% | |
| Culture | Going to the theatre, reding | 20/ | |
| | poems, visiting museums | 2% | |
| Other | | 2% | |
| Total | | 100% | |

Correlations between variables are presented in Table 6. Ambition was positively correlated with both harmonious and obsessive passion and with extremism. Furthermore, obsessive passion was highly and positively correlated with extremism while harmonious passion was not correlated with extremism, confirming the results we found in Study 3a.

Table 6

Descriptive Statistics and Correlations between Ambition, Obsessive and Harmonious Passion, and Extremism

| | M (SD) | 1 | 2 | 3 | 4 |
|-----------------------|-------------|-------|-------|-----|---|
| 1. Ambition | 3.51 (.83) | - | | | |
| 2. Obsessive Passion | 3.85 (1.40) | .26** | - | | |
| 3. Harmonious Passion | 5.40 (.10) | .40** | .12* | - | |
| 4. Extremism | 3.96 (1.33) | .36** | .49** | .11 | - |

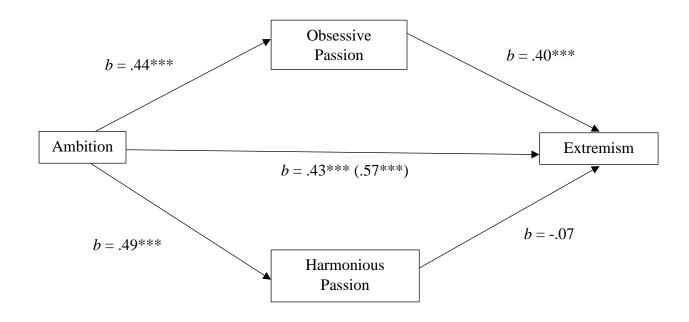
p* < .05. *p* < .01

As with Study 3a, the results of the mediation model showed that ambition positively predicted both obsessive [b = .44, SE = .09, t = 4.59, p < .001, (95% CI = .25, .62)] and harmonious passion [b = .49, SE = .06, t = 7.61, p < .001, (95% CI = .36, .61)]. Obsessive passion, in turn, positively predicted extremism [b = .40, SE = .36, .61)].

.05, t = 8.42, p < .001, (95% CI = .31, .49)]. Unlike in Study 3a, however, in Study 3b, although harmonious passion negatively predicted extremism, this relationship was not significant [b = -.07, SE = .07, t = -1.03, p = .304, (95% CI = -.21, .07)], (see Figure 3).

Figure 3

Coefficients Representing Effects of Ambition on Passion and Extremism



Note. The total effect of ambition is included in parenthesis.

p* < .05. *p* < .01. ****p* < .001

Moreover, we found a significant and positive indirect effect of ambition on extremism via obsessive passion [Effect = .17, SE = .05, (95% CI = .09, .28)]. We did not find an indirect effect of ambition on extremism via harmonious passion [Effect =

-.04, SE = .04, (95% CI = -.11, .03)]. The results of the pairwise contrast of the indirect effects showed a significant difference between the indirect effects, thus supporting the results obtained in Study 3a. In particular, the specific indirect effect through obsessive passion was larger than the specific indirect effect through harmonious passion with a 95% CI of .10 to .34. The results also showed a significant positive direct effect of ambition on extremism. Controlling for age and gender did not change the pattern of results.

As in Study 3a, we tested the alternative model in which obsessive passion predicted ambition, which, in turn, predicted extremism, while controlling for harmonious passion. The results showed a significant indirect effect of obsessive passion on extremism via ambition [Effect = .05, SE = .02, (95% CI = .02, .09)].

Multi-Group Path Analyses. Restricting the parameters of the mediation model to be equal across the two countries did not result in a significantly worse fit than if parameters were allowed to vary freely $[\chi^2(3) = .974, p = .807]$, indicating that the effects were equal across countries. Similarly, restricting the parameters of the mediation model to be equal across gender did not result in a significantly worse fit than if parameters were allowed to vary freely $[\chi^2(3) = 6.77, p = .080]$, thus, indicating that the effects were also equal across gender.

Discussion

The results obtained in Study 3b generally supported those found in Study 3a, with a sample from a different nationality. As in Study 3a, we found that ambition positively predicted both obsessive and harmonious passion, thus supporting the idea that ambitious people are prone to engage in their activities both in an obsessive and harmonious fashion. Additionally, we confirmed that ambition leads to extremism

through obsessive passion. However, in Study 3b, we did not find a mediating role of harmonious passion. Although the relationship between harmonious passion and extremism was not significant, the effect was negative. Thus, both studies obtained results in the same direction regarding the relationship between harmonious passion and extremism, though the relationship was significant only in Study 3a. Furthermore, in both studies, we found a noticeable difference between the indirect effects of obsessive and harmonious passion in the relationship between ambition and extremism, bolstering the evidence that obsessive passion had a greater impact than harmonious passion in the mediation model. Finally, in the second sample we confirmed that ambition has a direct effect on extremism, suggesting that ambitious individuals can directly engage in extremism.

As in Study 3a, the correlational nature of the data did not allow us to draw causal inferences. When testing the alternative model, we found a significant indirect effect of obsessive passion on extremism via ambition. However, the effect size of the indirect effect is considerably smaller that the indirect effect of ambition on extremism via obsessive passion. Thus, we can reasonably sustain that the model we hypothesized resulted in a better fit with the data.

Summary

In both samples described in this chapter, we found support for our hypothesis that ambition can lead to extremism through obsessive passion. Specifically, Study 3a and Study 3b, which utilized samples of Italian and American adults, respectively, demonstrated that ambition is positively related to both obsessive and harmonious passion, a result consistent with prior literature suggesting that ambition involves commitment to one's own goals and persistence in different realms (e.g., Judge &

Kammeyer-Mueller, 2012). Thus, ambitious individuals are prone to engage in activities they love, in both an obsessive and harmonious fashion. In both studies, we found that obsessive passion significantly positively predicted extremism. We also found that harmonious passion was negatively related to extremism, although this relationship was significant only in Study 3a. However, when testing the model invariance, we found that the indirect effect of ambition on extremism through harmonious passion was the same across countries (thus, across the two studies).

The studies described in the present chapter aimed to enrich knowledge regarding ambition and particularly, to investigate the process that leads ambition to extremism. Across two studies, we found support for our predictions that ambition leads to extremism through obsessive and not harmonious passion. Those findings confirm once again the relationship between ambition and extreme behavior, particularly, employing a new measure of ambition. Moreover, findings from both samples shed new light on the dynamics that lead from ambition to extreme behavior, suggesting a possible mechanism for preventing extremism in ambitious individuals.

What remains unclear is under which condition the relation between ambition and extremism is strengthened. This exploration will be investigated in the next chapter.

Chapter 7

Study 4: When ambition leads to extreme behavior: The role of relative deprivation

Introduction

Ambitious individuals are characterized by strong persistence in pursuing valuable goals, such as success and attainment, because they have the superordinate goal to gain respect, admiration, and recognition by others. As we previously said, we can conceive of ambition as a manifestation of the quest for significance, so that ambitious individuals are prone to channel their resources toward one great, valuable objective to gain their significance, thus resulting in extreme behavior, as demonstrated in the previous studies. Therefore, ambitious individuals are particularly sensitive to situations in which their worth and respect (i.e., significance) are dishonored (Resta et al., 2022b). Relative deprivation is a condition in which this can happen.

Relative Deprivation

Every day, individuals perceive that they are treated unfairly or unjustly. We may perceive that other people have been given benefits which we have been denied, or that others are given opportunities or rewards to which we were entitled or of which we were more deserving. This perception is often explained within the context of relative deprivation (Stouffer et al., 1949), in which individuals make comparisons between themselves and relevant reference groups and perceive that they have been unjustly disadvantaged in comparison to that reference group, thus engendering feelings of frustration, anger, and resentment (e.g., Crosby, 1976). In response to such

negative feelings, an individual experiencing relative deprivation will pursue any actions they believe will improve their situation, including those which solidify their social identity and aim to raise the status of their social group (e.g., Ellemers, 2002). Indeed, relative deprivation has been found to predict a range of life-improving actions, from international migration (Stark & Taylor, 1991) to preference for immediate gratification and gambling urges (Callan, Shead, & Olson, 2011).

Ambition, the Quest for Significance, and Extreme Behavior

Given ambitious people's high need to stive for their significance up to the point of engaging in extremism, it is reasonable to hypothesize that ambitious individuals might be especially affected by relative deprivation. In fact, relative deprivation concerns situations in which people's worthiness is disrespected. Being surpassed by others in an unfair way or seeing others obtaining what you deserved can be recognized as situations where one perceives a reduction in personal significance. The present chapter aims to explore what happens when ambitious individuals are hindered, disadvantaged, or given less opportunities in the process of reaching their significance. We predict that when personal significance is challenged by conditions of personal injustice, individuals, especially ambitious ones, increase their willingness to selfsacrifice for one objective in order to restore their dignity and respect.

Literature on significance quest suggests that – even temporary – experiences of humiliation or failure drive individuals to the engagement in extreme actions to restore their lost significance (Kruglanski et al., 2021; Kruglanski et al., 2022). In this regard, research showed that when individuals feel humiliated, they are prone to support more strongly their political orientation (Webber et al., 2018). Dugas and colleagues (2016) found that people who feel socially rejected or have failed are more willing to

self-sacrifice. Moreover, Bélanger (2013) reported that members of Liberation Tigers of Tamil Eelam (an extremist group) who felt insignificant were more prone to support extreme behavior, such as political violence. Similarly, religious people experiencing sexual guilt (i.e., significance loss) were found to be more prone to self-sacrifice (Bélanger, Kruglanski & Kessels, 2019).

Purpose of the Study

Building off of the previous research demonstrating that ambitious people, characterized by higher levels of significance quest, are more sensitive to personal injustice (Resta et al., 2022b), we presently hypothesized that relative deprivation can moderate the relationship between ambition and extreme behavior. Specifically, we predict that ambitious individuals, who put their quest for significance above other things, and therefore are prone to make sacrifices for their quest for significance, when confronted with relative deprivation, increase their engagement in extreme behavior to restore their significance. We tested our predictions across two studies. In Study 4a, through a cross-sectional design and employing an American sample, we hypothesized that ambition would lead to more extreme behavior under a condition of high relative deprivation. In Study 4b, we tested the same hypothesis though an experimental design and employing an Italian sample. In both studies we used the Justice Sensitivity Scale (Schmitt et al., 2010) to assess and manipulate the relative deprivation. This measure is designed to capture feelings of frustration, anger, and resentment as they are the emotional correlates of relative deprivation.

Study 4a

Method

Procedures, Design and Participants. To determine the minimum sample size, we conducted an a priori power analysis using G*Power 3.1.9.4 (Faul et al., 2009). Assuming small to medium effect size ($f^2 = .04$), with three predictors, power set to .80 and α set to .05, the analysis revealed a required sample size of 277. We recruited 299 American adults (55.9 percent male), aged 18 to 50 years old (M = 31.30, SD = 8.48), to take part in a cross-sectional study. Among participants, 33.4 percent had a high school degree or equivalent, 32.1 percent had earned a bachelor's degree, 27.1 percent had earned a master's degree, and 4.7 percent had earned a PhD. Participants were enrolled online through a paid procedure provided by Prolific. After providing informed consent, participants were asked to fill out an online questionnaire aimed to assess justice sensitivity, ambition, and extreme behavior.

Measure

Justice Sensitivity. Participants' justice sensitivity was assessed through an abridged and adjusted version of the Justice Sensitivity Scale's victim perspective (Schmitt et al., 2010). Individuals were asked to indicate their agreement with statements regarding feelings of frustration and discomfort in response to situations of relative deprivation (five items, e.g., "*I am bothered when people get what I deserve*"). Responses were provided on a five-point Likert scale (1 = "Definitely disagree"; 5 = "Definitely agree") and were averaged to form a single justice sensitivity score (Cronbach's alpha = .82). The items of the Justice Sensitivity Scale can be found in Appendix G.

Ambition. Participants' ambition was assessed through the English version of the Ambition Scale (Resta et al., 2022a), the same employed in Study 3b, which showed an excellent reliability (Cronbach's alpha = .91).

Extreme Behavior. Participants' extreme behavior was assessed through an abridged version of the Self-Sacrifice Scale (Bélanger et al., 2014), the same measure employed in Study 2. Responses were averaged to form a single extreme behavior score (Cronbach's alpha = .72).

Results

Table 7

Descriptive Statistics and Correlation between Justice Sensitivity, Ambition, and Extreme Behavior

| | M (SD) | 1 | 2 | 3 |
|------------------------|-------------|------|-------|---|
| 1. Justice sensitivity | 3.15 (.88) | - | | |
| 2. Ambition | 3.50 (.83) | .14* | - | |
| 3. Extreme behavior | 4.46 (1.20) | .09 | .18** | - |

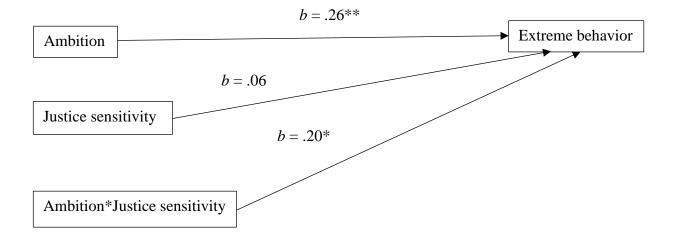
*p < .05. **p < .01

As shown in Table 7, we found a positive and significant correlation between justice sensitivity and ambition, as well as between extreme behavior and ambition, consistent with the previous studies demonstrating the proneness of ambitious individuals to engage in extremism. Moreover, we did not find a correlation between justice sensitivity and extreme behavior.

To test the moderating role of justice sensitivity in the relationship between ambition and extreme behavior, we used PROCESS v3.5 (Hayes, 2018), Model 1. As shown in Figure 4, ambition positively and significantly predicted extreme behavior [b= .26, SE = .08, t = 3.14, p = .002, (95% CI = .10, .42)], whereas justice sensitivity did not predict extreme behavior [b = .06, SE = .08, t = .75, p = .456, (95% CI = -.10, .21)], as expected. Importantly, we found a positive and significant interaction between ambition and justice sensitivity on extreme behavior [b = .20, SE = .08, t = 2.45, p =.015, (95% CI = .04, .37)], indicating that the positive relationship between ambition and extreme behavior was stronger for higher scorers on justice sensitivity.

Figure 4

Results of the Moderated Model Tested in Study 4a

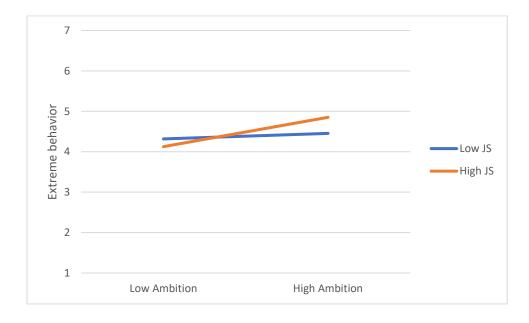


p < .05 **p < .01

A simple-slope analysis revealed that the relationship between ambition and extreme behavior was positive and significant at high levels of justice sensitivity (1 *SD* above the mean), [b = .44, SE = .11, t = 3.92, p < .001, (95% CI = .22, .66)], whereas this relation was non-significant at low levels of justice sensitivity (1 *SD* below the mean), [b = .08, SE = .11, t = .76, p = .447, (95% CI = -.13, .30)], (see Figure 5).

Figure 5

Results of Simple-slope Analysis to Interpret the Effect of the Interaction between Ambition and Justice Sensitivity on Extreme Behavior



N.B. JS = Justice sensitivity

Discussion

In Study 4a, we aimed to investigate the moderating role of negative reactions to relative deprivation (i.e., justice sensitivity) in the relationship between ambition and extreme behavior. Given that ambitious individuals are especially sensitive to personal injustice, due to their strong quest for significance, we hypothesized that they would react with extreme behavior to unfair treatment. The results of Study 4a bolstered our predictions. Specifically, we found that ambitious individuals are prone to engage in extreme behavior, but that reactions to relative deprivation (i.e., justice sensitivity) do not predict extremism. However, when testing the effect of the interaction between

ambition and justice sensitivity on extreme behavior, we found that ambitious individuals are more prone to engage in extreme behavior when they have high levels of justice sensitivity; ambitious people were not more likely to engage in extreme behaviors when they had low levels of justice sensitivity.

Our results constitute the first evidence of the moderating role of relative deprivation in the relationship between ambition and extreme behavior. However, the findings of Study 4a were obtained through correlational data which prevented us from drawing firm conclusions. In particular, Study 4a does not provide information as to whether ambitious individuals in front of induced feelings of relative deprivation increase their extreme behavior. Additionally, the present study was conducted with an American sample, precluding generalization of the findings to other populations. To address those issues, we implemented a second study.

Study 4b

To find further support for and generalize the results of Study 4a, we conducted a second study, using a sample of Italian participants. We tested the same hypothesis of Study 4a, this time through an experimental design in which we manipulated justice sensitivity.

Method

Procedures, Design and Participants. To determine the minimum sample size, we conducted an a priori power analysis using G*Power 3.1.9.4 (Faul et al., 2009). Assuming medium effect size (f = .25), power set to .80 and α set to .05, the analysis revealed a required sample size of 180. We recruited 200 Italian adults to take part in an experimental design in which we manipulated justice sensitivity through a recall task. Those who did not respond to the manipulation were excluded. Thus, the final

sample was constituted of 193 participants (51.3 percent female), aged 19 to 49 years old (M = 27.45, SD = 7.18). Among the participants, 43.5 percent had a high school degree, 51.3 percent had earned a bachelor's degree, and 5.2 percent had earned a PhD. Participants were recruited online through a paid procedure provided by Prolific. After giving informed consent, participants were asked to fill out an online questionnaire, the first part of which was designed to assess ambition. Subsequently, participants were randomly assigned to one of two possible conditions: (1) justice sensitivity, or (2) control. Finally, extreme behavior was measured.

Measure

Ambition. Participants' ambition was assessed through the Italian version of the Ambition Scale (Resta et al., 2022a), the same scale employed in Study 3a (Cronbach's alpha = .89).

Manipulation of Justice Sensitivity. Participants were randomly assigned to one of two conditions. In both, individuals were asked to recall three situations. In the "justice sensitivity" condition, participants were first asked to describe a time when they felt bothered because they had fewer opportunities than others to fulfill their ambitions. Second, they were asked to carefully describe a time when they felt frustrated because they had to work hard to achieve a goal that others easily gained. Finally, they were asked to carefully describe a situation where they felt bothered because others got what the participants believed they themselves deserved (see Appendix H for more details). In the "control" condition, participants were first asked to describe the prototypical restaurant they are used to going to. Last, they were asked to describe their typical day (see Appendix I for more details).

Manipulation Check. To verify whether our manipulation worked, after the recall task, all participants indicated via a single item the extent to which they felt unjustly treated in the situations about which they had just written. Responses were provided on a ten-point Likert scale (1 = "Not at all"; 10 = "A lot"). We expected that the participants assigned to the "justice sensitivity" condition would score higher on this measure than those assigned to the "control" condition.

Extreme Behavior. After the manipulation check, we assessed extreme behavior in all participants through the same scale employed in Study 2. However, in this study, participants were asked to list one objective (instead of a cause) that was very dear to them and subsequently responded to items designed to evaluate the extent of sacrifice *in the present moment*, rather than in general (e.g., *"Right now, I would strive to achieve this objective, even if my loved ones rejected me"*). Responses were averaged to form a single extreme behavior score (Cronbach's alpha = .73).

Results

Table 8

Descriptive Statistics and Correlation between Ambition, Extreme Behavior, and Condition

| | M (SD) | 1 | 2 | 3 |
|---------------------|-------------|-------|----|---|
| 1. Ambition | 3.50 (.75) | - | | |
| 2. Extreme behavior | 3.84 (1.26) | .22** | - | |
| 3. Condition | - | .16** | 01 | - |
| | | | | |

p* < .05 *p* < .01

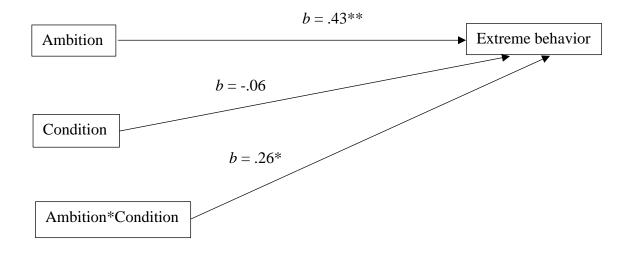
As displayed in Table 8, confirming the results of Study 4a, we found a positive and significant correlation between ambition and extreme behavior. We also found a weaker, albeit nonetheless positive and significant correlation between ambition and condition. Given that condition was randomly assigned after ambition had already been measured, it is likely that this weak correlation arose arbitrarily. Similarly to Study 4a, we did not find a correlation between the assignment to the justice sensitivity (vs. control) condition and extreme behavior.

To test if the exposure to manipulation (vs. control) generated higher scores on perception of injustice, we performed an independent sample t-test. Results showed a significant difference between the two conditions, t(191) = -17.51, p < .001, indicating that participants assigned to the "justice sensitivity" condition perceived stronger feelings of personal injustice (M = 7.44, SD = 1.72) compared to those assigned to the "control" condition (M = 2.58, SD = 2.07).

To test the moderating role of (induced) justice sensitivity on the relationship between ambition and extreme behavior, we employed the same model as was assessed in Study 4a. Confirming the results of the previous study, we found that ambition positively and significantly predicted extreme behavior [b = .43, SE = .12, t = 3.58, p <.001, (95% CI = .19, .67)], while condition did not [b = -.06, SE = .09, t = -.71, p = .482, (95% CI = -.24, .11)]. Most importantly, we found a positive and significant effect of the interaction between condition and ambition on extreme behavior [b = .26, SE = .12, t = 2.12, p = .036, (95% CI = .02, .50)], showing once again that the relationship between ambition and extreme behavior tended to be more strongly positive under the "justice sensitivity" condition (see Figure 6).

Figure 6

Results of the Moderated Model Tested in Study 4b

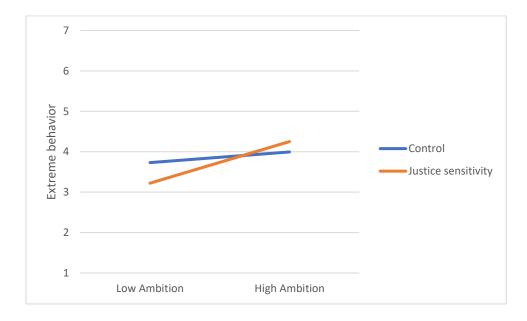


p* < .05 *p* < .01

The simple-slope analysis revealed that, akin to Study 4a, the relationship between ambition and extreme behavior was positive and significant under the "justice sensitivity" condition, [b = .69, SE = .19, t = 3.71, p < .001, (95% CI = .32, 1.06)], and it became non-significant under the "control" condition, [b = .18, SE = .16, t = 1.14, p = .258, (95% CI = -.13, .48)], (see Figure 7).

Figure 7

Results of Simple-slope Analysis to Interpret the Effect of the Interaction between Ambition and Condition on Extreme Behavior



Discussion

The results obtained in Study 4b confirmed those of Study 4a, using an experimental methodology and a sample from another nationality. As in Study 4a, we found that ambitious individuals are prone to engage in extreme behavior, while the recalling of emotionally negative situations due to relative deprivation (vs. emotionally neutral situations) did not predict extremism. Critically, we confirmed that the relationship between ambition and extreme behavior was moderated by relative deprivation. Ambitious individuals were significantly more likely to engage in extreme behavior in pursuit of a valued objective only after recalling three situations in which they felt they had been treated unfairly. After recalling three emotionally neutral

situations, ambitious people were not significantly more likely to engage in extreme behavior in pursuit of a valued objective. Thus, ambitious people are more prone to extremism in reaction to personal injustice, rather than in reaction to everyday situations.

Summary

In two studies described presently, we tested the moderating role of relative deprivation in the relationship between ambition and extreme behavior. Specifically, Study 4a employed an American sample and tested our hypothesis through a crosssectional design, showing that ambitious individuals are prone to engage in extreme behavior when they experience negative feeling in reaction to relative deprivation (i.e., justice sensitivity). Moreover, we did not find an effect of justice sensitivity on extremism, in contrast to other findings that relative deprivation is "a key factor driving violent extremism across cultures and contexts" (Kunst & Obaidi, 2020, p. 55). Of course, the present study measured extremism and willingness to sacrifice generally and in pursuit of personally selected goals, rather than violent extremism in particular. Due to the correlational nature of the data in Study 4a, we were not able to draw causal inferences. Hence, we conducted a second study, employing an experimental design and an Italian sample. In Study 4b, participants completed the measure of ambition and then were randomly assigned to one of two conditions. One condition was designed to elicit negative feelings due to relative deprivation (i.e., justice sensitivity condition); the other one asked participants to describe emotionally neutral situations (i.e., control condition). After completing the manipulation, extreme behavior was assessed. The results of Study 4b confirmed those of Study 4a, demonstrating that ambitious individuals are likely to engage in extremism in reaction to personal injustice, but they are not significantly likely to engage in extremism in everyday situations. Akin to Study

4a, we found a significant and positive effect of ambition on extremism, while we did not find any effect of assignment to the justice sensitivity (vs. control) condition on extremism.

In conclusion, the studies presented in this chapter constitute further evidence that ambition leads to extreme behavior, and they confirmed this notion employing a new measure of ambition. Moreover, findings embodied in this chapter enrich knowledge about the motivational dynamics in which ambition is involved, predicting situations in which ambitious individuals are likely to engage in extreme behavior.

General discussion

The present dissertation aimed to provide a clear definition of ambition and to investigate its antecedent and consequences. In the first, correlational, study we tested and found that inspiration can activate ambition, which, in turn, would lead to extremism. In the second study we replicated the findings of ambition leading to extreme behavior through a longitudinal study. In the third, correlational study, conducted in two samples of different nationalities, we predicted and found that ambition results in extremism through obsessive but not harmonious passion. In the fourth, final, study, we employed correlational and experimental design, along with samples of different nationalities, to demonstrate that relative deprivation moderates the relationship between ambition and extreme behavior.

Drawing from the evidence embodied in the present dissertation, we can arguably say that ambitious individuals are characterized by strong persistence towards valuable goals such as success and attainment because they have the superordinate goal to achieve respect, notoriety, and recognition from others. By those features ambition can be considered a manifestation of the fundamental need for significance, defined by Kruglanski and colleagues (2022) as the desire to matter, have dignity, and gain respect. Ambitious individuals, who strongly strive for achieving a better position than the status quo, are prone to set all other goals apart, in the sake of the one goal that will lavish them with significance, resulting in extreme behavior, as the significance quest can result in extremism. This notion was confirmed across all four studies displayed in the present dissertation. It must be noted that the first two studies employed a measure of ambition previously used in literature but never validated, while the other two employed

a new measure, designed to tap into the definition of ambition we provided above. Similarly, Study 1, Study 3a and Study 3b employed a measure of general extreme behavior. In those studies, extremism was assessed through the extent to which individuals devoted their cognitive, emotional, and behavioral resources toward only one main goal. In Study 2, Study 4a and Study 4b, instead, participants were asked to list an objective or an activity they highly value, and then to indicate the extent to which they would sacrifice themselves or their possessions in the sake of that objective/activity. Therefore, the relationship between ambition and extreme behavior was demonstrated employing different measures of the same construct of both ambition and extreme behavior.

Going into the details of our findings, the present dissertation shows that inspiration can increase individuals' ambitiousness, which, in turn, leads to extreme behavior. This result is consistent with our predictions and with literature showing that inspiration concerns motivational dynamics and that it is related to goal pursuit (Milyavskaya et al., 2012; Trash & Elliot, 2003).

Study 3a and 3b were designed to shed new light on the process that drives ambitious individuals to engage in extreme behavior. Our results suggest that when ambitious individuals are characterized by an obsessive passion, they are more inclined to extremism; whereas, when they are characterized by a harmonious passion, they are less inclined to extremism. These results are consistent with studies which found that obsessively passionate dancers were more likely to return to dancing before fully recovering from injuries (Rip, Fortin, & Vallerand, 2006) and that obsessively passionate workers were more likely to exhibit workaholism (Dalla Rosa & Vianello, 2020). The results are also consistent with findings that harmonious passion negatively predicts engagement in radical networks (Bélanger et al., 2020).

The results from Study 3a and 3b provide an important link in the chain between ambition and extremism. Ambition and passion together do not necessarily lead to extremism. Rather, it is only when ambition is coupled with *obsessive* passion, and not with harmonious passion, that the individual sets aside all else in order to pursue the object of their passion and attain great significance. The addition of obsessive passion into the model illuminates the path by which ambition and passion can together become maladaptive. However, the addition of harmonious passion into the model illuminates the way that ambitious and passionate people can pursue their goals without sliding into extremism and sacrificing their other needs, goals, and facets of their identities. It is to note that the results show that ambitious people, generally, are prone to extremism, but also that the relationship between ambition and extremism is mediated by obsessive, not harmonious, passion. That is, ambitious people are likely to be passionate about pursuing their goals, but it is only when they pursue their goals obsessively, at the expense of all other needs, that they engage in extremism. When ambitious people passionately pursue their goals while also attending to their other needs, they are less likely to engage in extremism.

Study 4a and 4b were designed to investigate the hypothesis that relative deprivation can moderate the relationship between ambition and extreme behavior. Findings from both samples showed once again that ambition predicts extreme behavior, supporting the results of the previous three studies. More interesting, we predicted and found that relative deprivation, whether measured or induced, intensifies ambitious individuals' likelihood to engage in extreme behavior in pursuit of valued causes or goals. Therefore, ambitious individuals, characterized by strong quest for significance, are particularly sensitive to situations where their worthiness is challenged, such as under condition of relative deprivation which concerns personal

injustice. As expected, we found that such situation propels ambitious individuals to self-sacrifice in order to restore their personal significance. It is to note that both in Study 4a and 4b we found a positive and significant main effect of ambition on extreme behavior. This notion is consistent with findings from Study 3a and 3b in showing that ambitious individuals, in general, are prone to engage in extreme behavior. Results from Study 4a and 4b extend the theoretical knowledge regarding the relationship between ambition and extreme behavior by identifying a particular condition under which this relationship is strengthened.

The present dissertation has two main limitations. First, data from most of the studies (Study 1, Study 3a, Study 3b and Study 4a) were obtained using cross-sectional design, which prevents us from drawing causal inferences. However, in Study 2 we tested the relationship between ambition and extreme behavior through a longitudinal design, which partially addresses the issue. Moreover, in both Study 3a and 3b, we tested the alternative model in which obsessive passion was the independent variable, ambition was the mediator and extremism was the dependent variable. In Study 3a, the results showed a small and non-significant indirect effect of obsessive passion on extremism via ambition. On the other hand, in Study 3b, we found a significant – though small – indirect effect of obsessive passion on extremism via ambition. Overall, those findings confirm that the model we hypothesized resulted in a better interpretation of data in both samples. Future studies should study the relationship between ambition and extreme behavior through an experimental design.

Secondly, across all studies we used a self-report measure to assess extremism, rather than actual behavior, perhaps making the measure less realistic or subject to social desirability bias. This limitation was mitigated, however, by employing the Self-Sacrifice Scale in Study 2, 4a and 4b, which asked participants to indicate a cause or a

goal very dear *to them*. Thus, in those samples, we measured extreme behavior in pursuit of a personal objective, enabling us to measure a realistic motivation to engage in extreme behavior rather than the motivation to engage in extremism for the sake of a general or imposed objective. Future studies could address this issue by exploring extremism as actual behavior, in more specific contexts.

Despite those limitations, we can identify fruitful theoretical and practical implications. The studies embodied in the present dissertation provide new findings to the existing literature on ambition, which has largely focused on workplace and organizational contexts, and provide a new definition of this construct. Our findings also enrich knowledge about extreme behavior, inspiration, passion, and relative deprivation. Indeed, they demonstrated that extreme behavior can be activated also by ambitiousness, leading individuals to engage in maladaptive strategies to achieve personal significance. Our findings also provide new insights about the motivational consequences of inspiration, which has been primarily associated to philosophical concepts and mostly ignored by psychological literature (Milyavskaya et al., 2012). Moreover, the present studies add notable understanding about the dynamics in which obsessive and harmonious passion are involved suggesting that ambitious individuals can pursue their goals both in an obsessive and harmonious way. Finally, they improve knowledge about the consequences of confronting a condition of relative deprivation, especially for ambitious people.

Practically, the studies embodied in the present dissertation demonstrate that efforts to prevent extremism may focus on different factors. For instance, promoting harmonious rather than obsessive passion, especially in ambitious people, can prevent the engagement in extremism. It is to note that we found a strong direct effect of ambition on extremism in Study 3a and 3b and a strong main effect of ambition on

extreme behavior in Study 4a and 4b. Those results have two main implications. First, we can conceive of ambitious people as generally prone to engage in extreme behavior, thus, efforts to prevent extremism must keep in mind that ambitious individuals may be prone to extremism, which can be (but need not be) antisocial and violent. Second, those findings suggest that some other crucial variables could explain how and when ambitious individuals engage in extremism. Extents to prevent extremism should bear in mind that other variables can lead ambitious individuals to engage in extremism or can strengthen the relationship between ambition and extremism.

Furthermore, actions aimed to prevent extremism should focus on diminishing negative reactions to relative deprivation, particularly in ambitious individuals. Another strategy to prevent (antisocial) extremism could be that of identifying ambitious people and redirecting their ambition to the pursuit of prosocial goals. This is consistent with previous findings regarding the need to provide individuals who are deradicalizing from violent extremism with alternative sources of significance (Webber et al., 2018).

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Appendix A

The Inspiration Scale

Please indicate how much you agree with each of the following items, using the following scale:

1 = Definitely disagree - 5 = Definitely agree

| Items | | | | | |
|---|---|---|---|---|---|
| 1. I feel inspired in what I do. | 1 | 2 | 3 | 4 | 5 |
| 2. Goals met or experiences actualized inspire me to realize the | | | | | |
| important goals I set myself. | 1 | 2 | 3 | 4 | 5 |
| 3. Successful people are models to follow. | 1 | 2 | 3 | 4 | 5 |
| 4. I feel encouraged by impactful people to realize my ambitions. | 1 | 2 | 3 | 4 | 5 |
| 5. I feel inspired by symbols of success and self-realization. | 1 | 2 | 3 | 4 | 5 |

Appendix B

The Ambition Scale by Dr. Duckworth

Please indicate how much you agree with each of the following items, using the following scale:

1 = Definitely disagree - 5 = Definitely agree

| Items | | | | | |
|--|---|---|---|---|---|
| 1. I seek to be the best in what I do | 1 | 2 | 3 | 4 | 5 |
| 2. I'm ambitious. | 1 | 2 | 3 | 4 | 5 |
| 3. The highest goal in life is achieving something important and | | | | | |
| long-lasting. | 1 | 2 | 3 | 4 | 5 |
| 4. I think success is overrated. (R) | 1 | 2 | 3 | 4 | 5 |
| 5. I aim to succeed. | 1 | 2 | 3 | 4 | 5 |

Appendix C

The Extremism Scale

Below, we will ask you about your thoughts, feelings, and behaviors related to goal pursuit. In each statement, please select an answer that describes you best. Be honest – there are no right or wrong answers!

1 – Definitely disagree 2 – Disagree 3 – Slightly disagree 4 – Neither agree nor disagree 5 – Slightly agree 6 – Agree 7 – Definitely Agree

| Items | | | | | | | |
|--|---|---|---|---|---|---|---|
| 1. My life is usually dominated by one main pursuit/desire. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I usually invest all of my time and energy into the one thing that matters to me the most. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I spend most of my time thinking about the one goal that matters to me the most. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Typically, my happiness depends on the one thing that I value most. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. When I devote myself to a goal, everything else becomes insignificant. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. There is usually one goal that looms large in my mind. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. My entire life is often subordinated to the one thing I find most important. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. When I focus on my most important goal, I easily forget other things. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. There is only one thing that can make me happy in life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. I stay faithful to my most important goal, even when it requires sacrifices to my other goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. When I decide on something, I go for it like my life depended on it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I react very emotionally to anything that is related to my most important goal. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix D

The Self-Sacrifice Scale

Now think about a cause that is very dear to you. Please, list the cause below:

Indicate your agreement with each of the following statements.

Scale: 1 = Do not agree at all - 7 = Very strongly agree

| Items | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. It is senseless to sacrifice one's life for a cause. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I would defend a cause to which I am truly | | | | | | | |
| committed even if my loved ones rejected me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I would be prepared to endure intense suffering | | | | | | | |
| if it meant defending an important cause. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. I would be ready to give my life for a cause that | | | | | | | |
| is extremely dear to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I would be willing to give away all my | | | | | | | |
| belongings to support an important cause. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix E

The Ambition Scale (Resta et al., 2022a)

Please indicate how much you agree with each of the following items, using the following scale:

1 = Definitely disagree - 5 = Definitely agree

Items

| 1. I am ambitious. | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|--|
| 2. One of my goals is doing something that leaves a mark. | 1 | 2 | 3 | 4 | 5 | |
| 3. I aim to succeed. | 1 | 2 | 3 | 4 | 5 | |
| 4. I aspire to do something special. | 1 | 2 | 3 | 4 | 5 | |
| 5. I never stop trying to overcome my limits. | 1 | 2 | 3 | 4 | 5 | |
| 6. I always aim higher than I know I can do. | 1 | 2 | 3 | 4 | 5 | |
| 7. I always try to stand out in what I do. | 1 | 2 | 3 | 4 | 5 | |
| 8. I aim to do or have something enviable. | 1 | 2 | 3 | 4 | 5 | |
| 9. I aim to hold positions of prestige and responsibility. | 1 | 2 | 3 | 4 | 5 | |
| 10. Attaining recognition, respect and consideration for what I do is very important to me. | 1 | 2 | 3 | 4 | 5 | |
| | | | | | | |

Appendix F

The Passion Scale

Now think about an activity that is very dear to your heart. Please list this activity below: _____

While thinking about the activity you listed, use the following scale to indicate your agreement with each of the following statements.

Scale 1 = Totally disagree -7 = Totally agree

| Items | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. This activity is in harmony with the other activities in my life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I have difficulties controlling my urge to engage in this activity. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. The new things that I discover with this activity allow me to appreciate it even more. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. I have almost an obsessive feeling for this activity. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. This activity reflects the qualities I like about myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. This activity allows me to live a variety of experiences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. This activity is the only thing that really turns me on. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. This activity is well integrated in my life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. If I could, I would only engage in this activity. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. This activity is in harmony with other things that are part of me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. This activity is so exciting that I sometimes lose control over it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I have the impression that this activity controls me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix G

The Justice Sensitivity Scale

Please indicate how much you agree with each of the following items, using the following scale:

1 = Definitely disagree - 5 = Definitely agree

| Items | | | | | |
|--|---|---|---|---|---|
| 1. I am bothered when people get what I deserve. | 1 | 2 | 3 | 4 | 5 |
| 2. I become demoralized when I have less opportunity to improve my abilities. | 1 | 2 | 3 | 4 | 5 |
| 3. I am bothered when I have to work hard to get something others get easily. | 1 | 2 | 3 | 4 | 5 |
| 4. I am irritated when I have less opportunity to realize my ambitions. | 1 | 2 | 3 | 4 | 5 |
| 5. I get frustrated when I bump into more obstacles than others to reach my goals. | 1 | 2 | 3 | 4 | 5 |

Appendix H

Manipulation of justice sensitivity

1. Please describe a time when you felt bothered because you had fewer opportunities than others to fulfill your ambitions:

2. Describe a time when you felt frustrated because you had to work hard to achieve a goal that others easily gained:

3. Please describe a situation where you felt bothered because others got what you deserved:

Appendix I

Task for the control condition

1. Please describe what constituted your last meal:

2. Carefully describe the prototypical restaurant you are used to going to:

3. Please carefully describe your typical day: